



Porcitech Manual 2012

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Title page 1

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Porcitech Manual 2012

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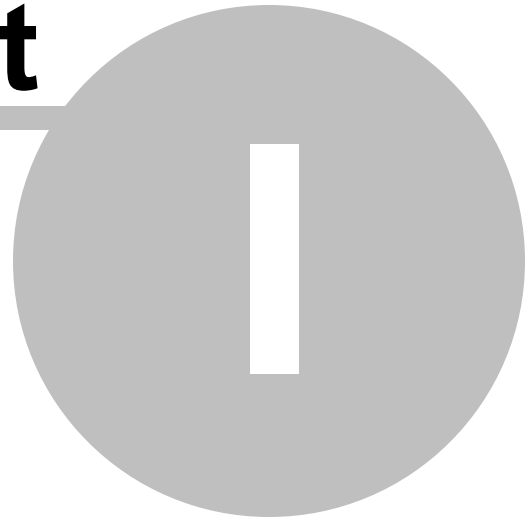
Foreword

This is just another title page
placed between table of contents
and topics

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



1 Introduction

1.1 Introduction

This is a computer program that manages and controls production data for farm animals at both the individual and herd level. Its basic working principle is to create relevant and effective reports capable of assisting farm managers, employees, and consultants in the management of the livestock farm.

This program can generate reports in the form of lists, statistics, or charts, that will schedule daily routine operations, monitor the performance of the herd, and help diagnose and control production issues. Reports can be modified or custom designed to serve the needs of the user.

Before using Porcitech for the first time, it is strongly recommended that you devote some time to read and understand the manual. Aside from learning to install Porcitech, you will learn how to use the software and become acquainted with its features, and how to customize it for your farm. You will also obtain information regarding advanced topics, such as the definition of new calculated variables, and you will find answers to the most frequently asked questions.

With the electronic wizardry available today, there seems to be no limit to what we can measure and record. The challenge, of course, is to select what we measure very carefully, making sure the information we gather has a purpose and a payback potential.

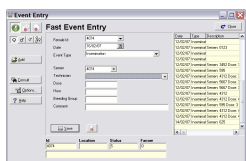
Note: This manual is the same for all editions of Porcitech (Express, Professional, Studio and Enterprise). Some options may not be available in your version.

1.2 Main features

This article shows the main features of Porcitech and how to improve your experience.

Data Entry

Porcitech offers several ways to enter data according to your specific procedures.



Fast Event Entry

Enter data by animal ID. This is the easiest and most intuitive way to enter multiple events to individual animals, such as when entering data from barn cards. The data is instantly assigned to the animal record as it is entered.

See:

Data entry alternatives

Fast Event Entry

Entry Heat not Served Insemination Natural Mating Embryo			
Date	Code	Boar	Technician
13/07/05	P7697	Y1033	HEN
25/12/05	P7697	Y1259	HEN
26/12/05	P7697	Y1259	HEN
26/12/05	P7697	Y1259	HEN
22/05/06	P7697	Y1436	HEN
23/05/06	P7697	Y1259	HEN
30/10/06	P7697	Y1259	HEN
31/10/06	P7697	Y1259	HEN
31/10/06	P7697	Y1259	HEN
15/03/04	P7698	Y817	PAU
17/03/04	P7698	Y817	PAU
03/04/04	P7698	Y966	PAU

Batch

Enter data by event. Batch data entry works similar to a spreadsheet and is very efficient for entering large amounts of data, especially if many animals share the same data fields. Useful if your recorded information is organized by event lists or batches.

See:

Data entry alternatives

How to: Enter 100 new females with a service in her record

How to: Enter a vaccination into the group of entered females



Handheld

Use any Pocket PC handheld computer or the Psion Workabout to enter data at the barn level. Bar codes or electronic identification can also be used with the handheld.

See:

Handheld computer



OCR

Optical Character Recognition (OCR) technology can be used to scan data collection forms and enter the data automatically into Porcitech.

See:

Automatic handwriting recognition



Bar Codes

The report designer included in Porcitech is prepared for use with bar code technology. From forms you can read the bar codes of dates or female IDs, or semen IDs from the semen bag. The reader can be used in the handheld or in the desktop computer.



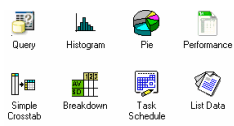
Network

The Porcitech database can be accessed concurrently by dozens of users. Porcitech accepts remote connections, which means that users can consult or enter data at the farm level, connect via local network (LAN) to the database, and send the data to the bureau company. Multiple users can enter data into the same database concurrently. Porcitech prohibits conflicts or data integrity problems.

See:

Open a farm

Reporting



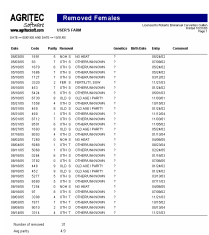
Report designers

Create any report. Porcitech incorporates a set of powerful report designers which allows you to create any type of list, graphic, or statistical report by extracting the information directly from the database. The designers include histogram, pie, SPC, breakdown, cross-tabulation, variable lists, management, performance and SQL assistants. The final objective of the reports is to help in the decision-making process.

See:

Report designers

Database consults



NAME	TYPE	REPORT	REPORT	REPORT	REPORT
REPORT1	1	REPORT1	REPORT1	REPORT1	REPORT1
REPORT2	2	REPORT2	REPORT2	REPORT2	REPORT2
REPORT3	3	REPORT3	REPORT3	REPORT3	REPORT3
REPORT4	4	REPORT4	REPORT4	REPORT4	REPORT4
REPORT5	5	REPORT5	REPORT5	REPORT5	REPORT5
REPORT6	6	REPORT6	REPORT6	REPORT6	REPORT6
REPORT7	7	REPORT7	REPORT7	REPORT7	REPORT7
REPORT8	8	REPORT8	REPORT8	REPORT8	REPORT8
REPORT9	9	REPORT9	REPORT9	REPORT9	REPORT9
REPORT10	10	REPORT10	REPORT10	REPORT10	REPORT10
REPORT11	11	REPORT11	REPORT11	REPORT11	REPORT11
REPORT12	12	REPORT12	REPORT12	REPORT12	REPORT12
REPORT13	13	REPORT13	REPORT13	REPORT13	REPORT13
REPORT14	14	REPORT14	REPORT14	REPORT14	REPORT14
REPORT15	15	REPORT15	REPORT15	REPORT15	REPORT15
REPORT16	16	REPORT16	REPORT16	REPORT16	REPORT16
REPORT17	17	REPORT17	REPORT17	REPORT17	REPORT17
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REPORT67	67	REPORT67	REPORT67	REPORT67	REPORT67
REPORT68	68	REPORT68	REPORT68	REPORT68	REPORT68
REPORT69	69	REPORT69	REPORT69	REPORT69	REPORT69
REPORT70	70	REPORT70	REPORT70	REPORT70	REPORT70
REPORT71	71	REPORT71	REPORT71	REPORT71	REPORT71
REPORT72	72	REPORT72	REPORT72	REPORT72	REPORT72
REPORT73	73	REPORT73	REPORT73	REPORT73	REPORT73
REPORT74	74	REPORT74	REPORT74	REPORT74	REPORT74
REPORT75	75	REPORT75	REPORT75	REPORT75	REPORT75
REPORT76	76	REPORT76	REPORT76	REPORT76	REPORT76
REPORT77	77	REPORT77	REPORT77	REPORT77	REPORT77
REPORT78	78	REPORT78	REPORT78	REPORT78	REPORT78
REPORT79	79	REPORT79	REPORT79	REPORT79	REPORT79
REPORT80	80	REPORT80	REPORT80	REPORT80	REPORT80
REPORT81	81	REPORT81	REPORT81	REPORT81	REPORT81
REPORT82	82	REPORT82	REPORT82	REPORT82	REPORT82
REPORT83	83	REPORT83	REPORT83	REPORT83	REPORT83
REPORT84	84	REPORT84	REPORT84	REPORT84	REPORT84
REPORT85	85	REPORT85	REPORT85	REPORT85	REPORT85
REPORT86	86	REPORT86	REPORT86	REPORT86	REPORT86
REPORT87	87	REPORT87	REPORT87	REPORT87	REPORT87
REPORT88	88	REPORT88	REPORT88	REPORT88	REPORT88
REPORT89	89	REPORT89	REPORT89	REPORT89	REPORT89
REPORT90	90	REPORT90	REPORT90	REPORT90	REPORT90
REPORT91	91	REPORT91	REPORT91	REPORT91	REPORT91
REPORT92	92	REPORT92	REPORT92	REPORT92	REPORT92
REPORT93	93	REPORT93	REPORT93	REPORT93	REPORT93
REPORT94	94	REPORT94	REPORT94	REPORT94	REPORT94
REPORT95	95	REPORT95	REPORT95	REPORT95	REPORT95
REPORT96	96	REPORT96	REPORT96	REPORT96	REPORT96
REPORT97	97	REPORT97	REPORT97	REPORT97	REPORT97
REPORT98	98	REPORT98	REPORT98	REPORT98	REPORT98
REPORT99	99	REPORT99	REPORT99	REPORT99	REPORT99
REPORT100	100	REPORT100	REPORT100	REPORT100	REPORT100

Customized report distribution

The bureau can create a set of customized report templates (designs) that can be distributed among Porcitech users via email. Users can then automatically run reports using the designs created in the bureau, for example customized Female History Cards or Performance Analysis reports.



Report delivering

Reports can be easily delivered via email among farms or customers. The **Preview** report window has a **Send** button to quickly send the report by your email program. It is also possible to schedule routine emailing of reports.



Benchmarking

Porcitech can generate comparisons or consolidations between several farms by time period, parity, genetics, or any other field. It can group and consolidate a subset of farms and compare them with other groups of farms in your company. Farms can be in the same computer or distributed among several computers.

You can customize the benchmarking reports by adding new expressions, changing the terminology or filtering by any criteria.

See:

Porcitech benchmarking with multiple databases



Remote connection

You can use your Porcitech from any location. You simply need an Internet connection and to specify the path where the database is located. If a farm has a copy of Porcitech, they can get any report by connecting to their database that resides in the bureau, according to assigned privileges.

See:

Open a farm

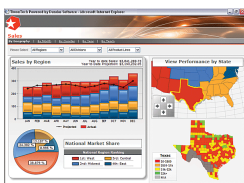


Microsoft Excel

You can use Microsoft Excel to create a powerful spreadsheet for benchmarking reports. Porcitech users can automatically upload the data to a web server daily or weekly. Then by simply opening the Excel document from any part of the world, charts and benchmarking from several farms are available for viewing. This can work offline, connecting to the Internet only to refresh the data.

See:

Microsoft Excel Benchmarking



Digital Dashboard

Agritec designs a customized **Digital Dashboard** to share information between farms.

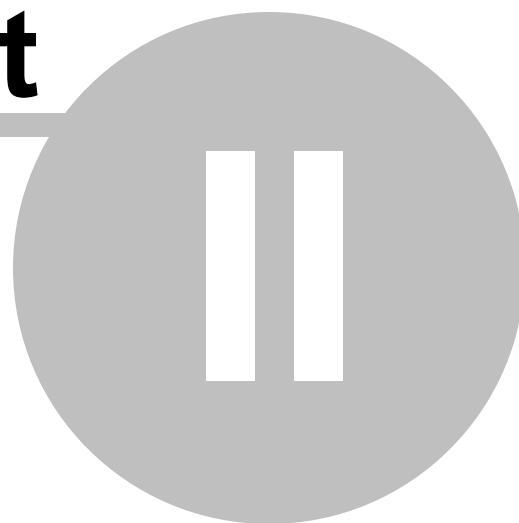
See:

Digital dashboard

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



2 Getting started

2.1 How to start

The first step is to download Porcitech from the Agritec website and install it. If you have paid for a commercial version you must login to your Customer Space. See Installation steps topic.

The second step is to set up the database:

- The default database included with the program is completely empty. If you do not have a historical database you may simply begin entering data into this file.
- See Upgrading from former versions if you were using a former version of Porcitech or the Express/demo edition.
- If you had a previous database file converted by Agritec, you received the file in a backup format and you will use the Restore procedure to connect the database. See Database restore .

We recommend you read the post at <http://agritecsoft.com/blog/?p=742&lang=en> that shows the basic steps to using Porcitech. It will help you get the general picture about the common procedures in Porcitech.

See also:

How to get help

Open database

Data entry overview

2.2 How to get help

Browse this manual

Before using Porcitech for the first time, it is strongly recommended that you devote some time to read and understand this manual. Aside from learning to install Porcitech, you will learn how to use the software, become acquainted with its features, and how to customize it for your farm. You will also obtain information regarding advanced topics, such as the definition of calculated variables used in reports, and you will find answers to the most frequently asked questions.

Search this manual

If you do not see the topic you are looking for, click the **Search** tab and type some keywords related to your query. The Search function should return a list of relative articles.

Agritec website customer support

You can access the Agritec website to get answers to frequently asked questions and to keep your copy of Porcitech up to date. You can login to your **Customer Space** and fill out a support ticket 24/7.

2.3 Main menu

FILE

Operations related with the application and database management.

New Database	Create a new farm database.
Open Database	Select an existing database to open from a list.
Change of Language	The program has been translated into several languages. Select the language of your choice.
Machine configuration	Change folder location for User defined reports and farm databases. Modify print margins.
Backup	Backup your database to a source of your choosing.
Restore	Restore a database.
Rebuild the Database	Occasionally new program updates may require you to rebuild the database.
Clean Database	Permanently delete old animal records. This will irrevocably alter your historical data and is not recommended.
Execute Agritec Script	Execute a script sent by Agritec to modify the database structure or data
Update Web Data Mart	Upload a data summary of the farm to a Web server. Only Ultimate editions of Porcitec.
Export Detailed Databases to Web	Upload the complete data of the farm to a Web server. Only Ultimate editions of Porcitec.
Configuration Options	Access Options menu.
Change Date	Change farm date.
Users	Define who can access the database and assign their privileges.
Enter License Code	Enter the License Code to configure Porcitec according the purchased features.
Enter Activation Key	Enter the Activation Key to activate Porcitec.

FARM

Operations related with the entire farm data.

Fast Event Entry	Enter data by animal ID code. Best for entering multiple events to an individual animal record.
Batch Event Entry	Enter data by event. Batch data entry works similar to a spreadsheet and is very efficient for entering large amounts of data, especially if many animals share the same data fields.

Pending Processing Events	Shows all events pending processing in Batch Event Entry.
Event Browser	List of all data entered in the time period you select. You can quickly correct a block of data that was incorrectly entered into a field of an event.
Select Individual for Breeding Herd	Automates the transfer from individual file to breeding female or male file, or to sales.
Quick Data	Access handheld computer menu.
Import Data	Import data from external sources, such as text files.
Export females to another database	Transfers females and their history from one farm or database to another.
Export data for genetic supplier	Export animal data in Dbase format for genetic supplier.
Synchronize automatic feeding system	Interface for Automatic Feeding Systems (AFS)
Adjust ingredient inventory	Enter or adjust feed and ingredient cost and inventory.
Produce ration	Create a ration inventory using the ingredients and a formula that you have previously defined in Options menu.
Financial	Access the Account Register in Financial if you wish to record farm purchases and sales.
Calculate Contemporary Groups	Calculate and update the average herd values of contemporary groups used in the SPI and BVSP formulas.
Change Female ID Codes	Modifies a block of IDs in the female file. Commonly used to modify the IDs of removed females so the IDs can be used again.

2.4 How to begin if you do not have an existing database

How to begin entering female records into Porcitech for an existing herd if you do not have a converted database:

Choose a start date

First, you must choose a starting date to begin your herd in Porcitech. It is not necessary, or even advisable, to add the entire herd inventory on this date. A female must have a status of Entered, Served, or Farrowed to begin her parity record. Therefore, on your starting date, you will begin entering only those females that farrow, are served, or are entered beginning on that date. Normally it will take one farrowing interval from your start date to inventory the entire herd. If you have historical breeding records for females that farrow, certainly you may add this information, but it is not required.

The Entry event

All breeding females, regardless of parity or reproductive status must first be added into Porcitech using the **Entry** event. The Entry event allows you to record important information about each female that does not change during the life of the animal, such as her genetics, birth date, origin, register (alternate) ID, and parity at date of entry. The Entry event gives the animal a status of Entered. She is now counted as inventory in your breeding herd. The Entry event may be immediately followed by an insemination or natural mating event, or a farrow event.

Initial Parity

In the Entry event, there is a field for **Initial Parity**. By definition, a female changes her parity on the date she is farrowed. She is considered to be Parity 0 until her first farrow event. When an older female is added using the Entry event, enter one number less than her next farrowing parity in the Initial Parity field. If Initial Parity is not specified, entered females will be designated as Parity 0.

We recommend you read the post at <http://agritecsoft.com/blog/?p=742&lang=en> that shows the basic steps to using Porcitech. It will help you get the general picture about the common procedures in Porcitech.

See also:

How to enter bred females in a new database

Using Batch to enter replacement females into the herd

How to enter purchased served females

2.5 Data entry overview

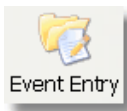
This article explains the basic and minimum steps to enter data into Porcitech.

To open the program, click the Porcitech icon on your desktop, or click **Start | Programs | Porcitech**. The main menu appears in your screen.

Before you begin entering data, it is important to review the program configurations in the **Options** menu to set up your farm. See Options menu: Adapting Porcitech to your farm. You can access Options from the main menu.

To enter data into animal records:

1. In main menu, click **Event Entry** button.



2. Click green **Fast Event Entry** button if it is not pressed.



3. Enter the **Female ID** and press **Enter**.

Date	Type	Description
12/02/07	Inseminat	
12/02/07	Inseminat Semen: 0123	
12/02/07	Inseminat	
12/02/07	Inseminat	
12/02/07	Inseminat Semen: 3452 Dose: 3	
12/02/07	Inseminat Semen: 595	
12/02/07	Inseminat Semen: 4312 Dose: 3	
12/02/07	Inseminat Semen: 5667 Dose: 3	
12/02/07	Inseminat Semen: 5667 Dose: 3	
12/02/07	Inseminat Semen: 4312	
12/02/07	Inseminat Semen: 4312 Dose: 4	
12/02/07	Inseminat Semen: 595 Dose: 3	
12/02/07	Inseminat Semen: 4312 Dose: 4	
12/02/07	Inseminat Semen: 4312 Dose: 4	
14/02/07	Inseminat Semen: 625	

Id	Location	Status	Farrow
4074		S	0

4. Enter the event date in **Date** and press **Enter**.
5. Select the **Event Type**. If the female does not exist in the database, only the **Enter** event is available.
6. Fill in the remaining fields. You can enter only into the fields that you use in your farm and ignore the others, or you may turn them off in Options|Event Fields, so that they do not appear.
7. When the cursor leaves the last field, the event will be saved automatically to the animal record. You can see the saved events in the right panel screen. If you do not need to use all the fields, when you finish entering data into an event you can click the Save button, or **Alt+S** keys, and the event will be saved and the cursor returned to the Female ID field.
8. Go to step 3. Porcitech shows the last values by default.

To Edit or consult animal records:

1. From the main menu click the **Females** button.
2. In **Fast Entry** click the **Edit History** button to view or modify the animal record. Click **F12** to return to Fast Entry when you are done.
3. In **Fast Entry** you can double-click the event you want to edit directly in the history window. If you need to delete an event you must do so in the Female file. Click the Edit History button to delete an event.

See also:

Data entry time-saving tips

Data Entry Alternatives

How to enter bred females in a new database

How to: Enter 100 new females with a service in her record

How to: Enter a vaccination into the group of entered females

2.6 Navigating Porcitech

Porcitech uses standard Windows key combinations for navigation. It is important to understand them to work the program with ease.

In Porcitech, there may be several ways to carry out a task. For example, to enter the Females file you can:

- Click the Females command in the Animals menu
- Click the Females icon button on the main menu bar.
- Press the F2 key

Keyboard

The keyboard is the fastest way for entering information into Porcitech. We recommend the keyboard instead of the mouse.

You will see many commands or buttons throughout Porcitech that start with a letter that is underscored, like Save.

This means press the **Alt key + the letter** to execute the command, in this case Alt + S to Save.

Enter or Tab	Next field
Shift + Tab	Previous field
Alt	Access menu
Alt + F4	Close dialog
Ins	Insert record in table
Ctrl + Del	Delete record in table
Alt + underlined	Buttons that have an underlined initial will be activated
F12	In Female file: Close event dialog and Save. Eliminates clicking the Enter key through empty fields
Alt + S	In Fast Entry: Save event

Entering Dates

Dates are entered in the same format as your Windows configuration, either dd/mm/yy or mm/dd/yy. For example, in dd/mm/yy format: 28 September 1999 is 28/9/99. If using mm/dd/yy format it is 9/28/99. 12 May 2001 would be either 12/5/01 or 12/5/2001.

Dates boxes accept several formats, for example only the day (12), or day and month (1205, or 0512 if configuration is month/day). Accepted date separators are any combination of < />, < .>, < ->, or < , >.

Porcitech accepts serial dates, commonly referred to as **1000 day calendar**. You must configure this in the Options menu. See Application format

You can use + or - key to increase or decrease the date in any date field. For example, if 12MAY2001 appears in the edit box and you type +2, the resulting date will be 14MAY2001.



If you are using a date in a custom filter of a report, dates must be enclosed with an apostrophe, like '1/1/10'.

Using the Calculator

Some numerical fields have a calculator icon at the right side of the field. Click this icon to open the calculator. In some screens, the number is related to another field. For example, when entering a sales event, you can type *15 in the weight field, and the result is automatically calculated. In this case, it will be the number of items multiplied by 15.

Closing a dialog

Dialogs where information has been entered can be closed in several ways:

 Close	Close and save. Fast key: Alt+L
	Close dialog without saving the changes. Fast key: Alt+F4
F12 key	F12 key closes the dialog and saves the data. Returns to Fast Entry after editing a record in Female file.

2.7 Reports for former PigCHAMP DOS users

Reports

If you are a former PigCHAMP DOS user and are looking for similar reports in Porcitech, the following is a list of some comparable reports.

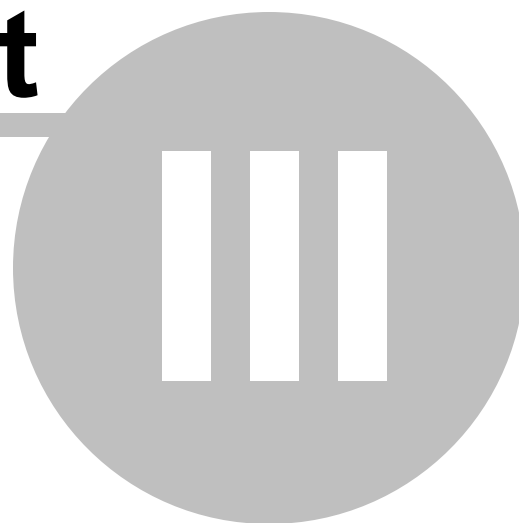
PigChamp report	Porcitech report	Report menu location	comments
Performance Monitor	Performance Analysis	Breeding Statistics	
Parity Distribution	Performance Analysis	Breeding Statistics	Select Parity breakdown
Subset report by genetics	Performance Analysis	Breeding Statistics	Select Genetics breakdown
Farrowing Rate report	Farrowing Analysis	Breeding Statistics	Select from several filters
Summary Cards (sow cards)	Female History Cards	Breeding Lists	Choose from several formats
History report	Female Event List	Breeding Lists	
Boar Usage	Male Usage	Breeding Lists	
Boar Performance	Male Performance	Breeding Lists	

PigChamp report	Porcitech report	Report menu location	comments
Breeding Group Performance	Groups Served Performance	Breeding Statistics	
Litter Selection	Litter Selection	Breeding Lists	
Farrow Location Performance	Farrow Location Performance	Breeding Statistics	
Pig Death Analysis	Pig Death Cross tab	Breeding Statistics	Select from several breakdowns
Repeat Estrus	Repeat estrus	Breeding Statistics	
Returns Post Weaning	Wean to First Service	Breeding Statistics	
Action List reports		Management reports	
Sow Performance Report	Female Lifetime Performance	Breeding Lists	
Database Applications		Click "New" button in reports menu	

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



3 Installation

3.1 Installation steps

The complete installation is composed of 4 steps:

1. Download Porcitech from your Customer Space
2. Install Porcitech in your computer
3. Enter your License Code
4. Enter the Activation Key

This is the simplest installation and the one appropriate for single users. Porcitech will be used only on one computer and no other users or computers will access the database via a network. If you want to install Porcitech in a network, you must follow other steps. Please see Installation in network multi-computer environment

After the installation, if you have a database, you need to create the connection. See Single user database connection

See also:

Open Database

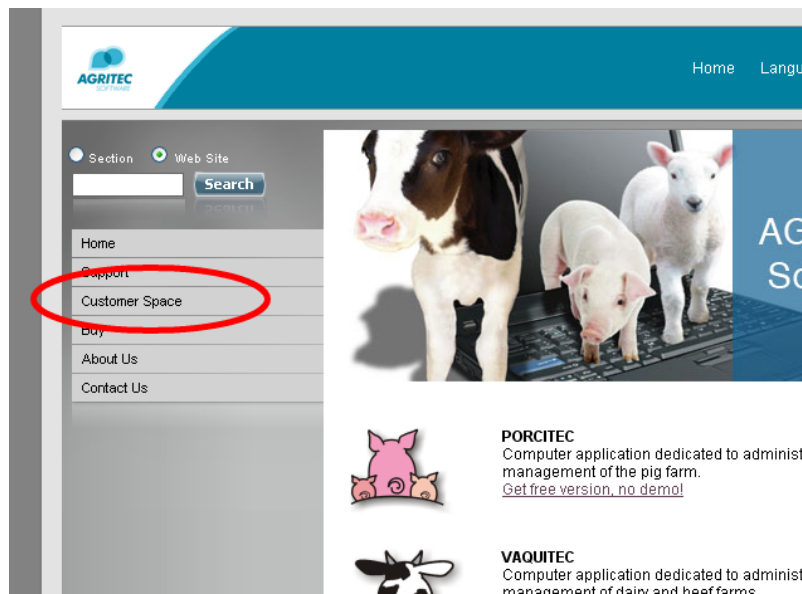
3.2 Downloading files from your Customer Space

Once you have paid for your program, you must login to your [Customer Space](#) to download your program, using your new login and password that was sent you in the e-mail that verified your payment. (Do not download Porcitech Express from the public web page of Agritec.)

In your Customer Space, click your Pack link, then click the Download link. The latest program release version will be the first in the list and is the version appropriate for most users. You will also find manuals in PDF format, components for a network environment, updates, and the latest beta version.

For detailed instructions see the following:

1. Go to <http://www.agritecsoft.com> web site
2. Click **Customer Space**



3. Enter your Email and password to authenticate you, then click **Enter**. You received this information in an e-mail sent to you when your create the order.

Home Language Support

The access to this area is restricted to registered users

Email

Password

Avantages of being an Agritec customer

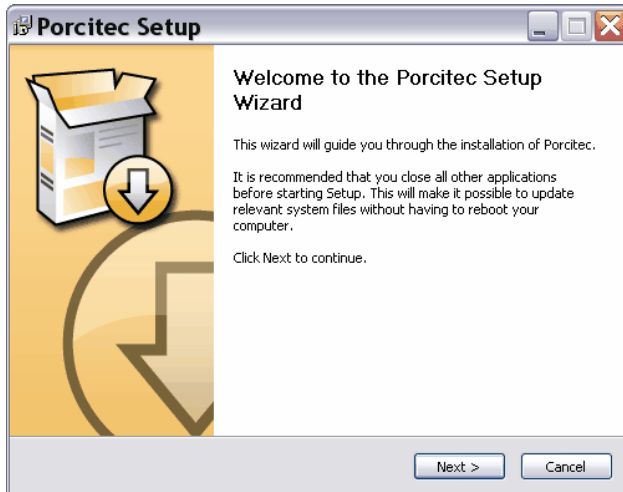
- Access to all options of the program depending on edition.
- Receive updates at the moment.
- Unlimited technical support.
- Participate actively in program development.
- Access to promotions and discounts.

4. Click the desired pack (you may have more than one)
5. Click **Download**
6. Scroll down the page and locate the file that you want to install or download
7. **Right click** the file link
8. Select **Save As...**

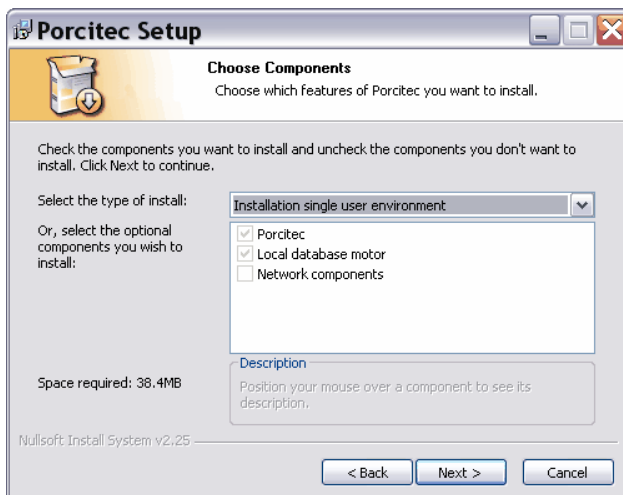
9. Be sure to remember where you saved the file (the Desktop might be a good place)

3.3 Installing Porcitech

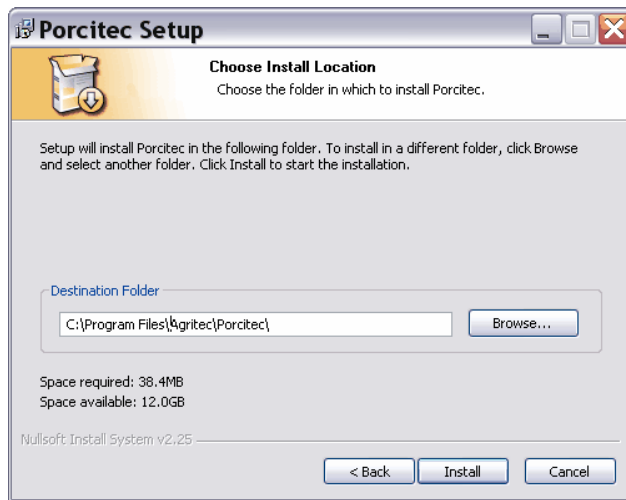
1. Download the Porcitech setup file from your **Customer Space**.
2. Double-click the installation file you just downloaded to start installing it on your computer.
3. Click **Next** button



4. Read the License Agreement and if you agree check **I accept...** box and click **Next**.
5. Select the type install. There are two modes:
 - Chose **Installation for single user environment** when Porcitech will be used only from this computer or you are not on a network.
 - Chose **Installation in network multi-computer environment** when Porcitech will be used by several users from different computers via network. This type of installation requires you to install Firebird in the server computer first. See Firebird installation



6. Select the folder where you want to install Porcitech and click **Install**.



7. Click **Finish** button.

At this point, Porcitech is installed in your computer. To open the program, click the Porcitech icon on your Desktop, or click Start | Programs | Porcitech.

The default database included with the program is completely empty. If you do not have a historical database you may simply begin entering data into this file.

If you had a previous database file converted by Agritec, you received the file in a backup format and you will use the Restore procedure to connect the database. See Database restore .

3.4 Entering the License Code

1. The License Code is sent to your e-mail within a few hours after purchasing your software. Once you have downloaded the program and received your License Code by email, you must copy and paste it into the program. Open your e-mail and go to the end of it.

- 6- Click 'Register' button
- 7- Over the edit box, click the right button of the mouse and select 'Paste'

Laura Roca
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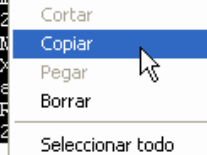
```
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8V8XFKh0o52Q=====
```

2. The License Code is the text included from *** to ---. Select the text keeping the left button of the mouse pressed. You MUST include these characters at the beginning and end of the text body.

- 6- Click 'Register' button
- 7- Over the edit box, click the right button of the mouse and select 'Paste'

Laura Roca
 Agritec Software
www.agritecsoft.com
support@agritecsoft.com

```
****rQ3DKefghdfhvhbjkhjkhcxvkR9DkaG5n6L7jjPqZ+usjE
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```



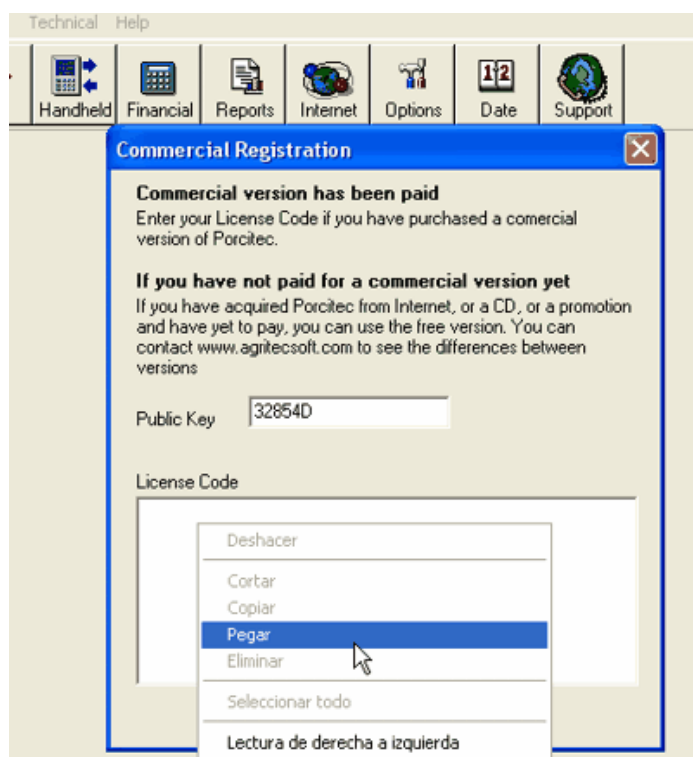
3. Move the cursor over the selection and click the right button of the mouse. Click Copy option.

- 6- Click 'Register' button
- 7- Over the edit box, click the right button of the mouse and select 'Paste'

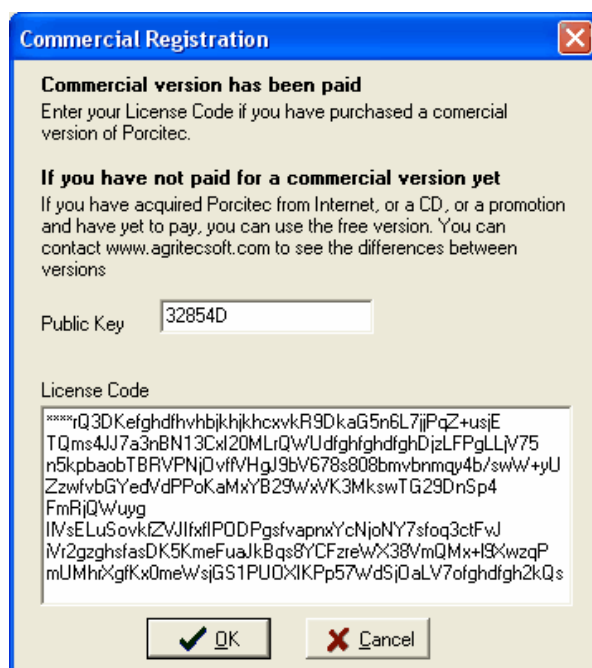
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```
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n5kpbaoBTBRVFNj0vffVHgJ9bV678s808bmvbnnmqy4b/swW+yU
ZzwfvbGYedVdPPoKaMxYB29WxVK3MksWTG29DnSp4FmRjQWuyg
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8V8XFKh0o52Q==----
```

4. Now open Porcitech from your desktop. The application icon is an animal picture.
5. -Click **File** menu and then click **Enter License Code**.
6. At the edit box, click the right button of the mouse and select **Paste**.



7. Click **OK** to activate the License Code.



8.To check the activation, click **Help** in the menu bar and then **About ...**

If you need to update your license code

- 1.Go to <http://www.agritecsoft.com> web site.
- 2.Click **Customer Space**.
- 3.Enter your Email and password to authenticate you, then click Enter. (You received this information in an e-mail sent to you when your created the order.)
- 4.Click the desired pack (you may have more than one).
- 5.Click **Get License Code**. Each pack has a different license and different License Code. Also, each program version has a specific license code. In some instances you may be sent by default the license for the latest version. If you have an older version number, make sure to request the corresponding license code for your program version.
- 6.The new license code will be sent to your email address within a few hours.

If the application returns an error in the license code

- Double check that you are entering the correct License Code version. Each License Code is specific for a particular version of Porcitec. You can see the Porcitec version number at the top of the license form and at the top of your program when you open it, or click Help/About at the main menu. The license number must match the version described in the body of the email you received.
- Some antivirus, anti-spy, or firewall software can block the license system. Please disable all of them before entering the License Code, then you can enable them again.

3.5 Entering the Activation Key

The Activation Key is an anti-piracy technology designed to verify that the product has been legitimately licensed. Every computer has a unique identifier number called a Machine Id. Porcitech application reads this **Machine ID** when you click **Enter Activation Key** in the **File** menu in the the main menu screen. This **Machine ID** is then used to generate the **Activation Key** in your **Customer Space** on the Agritec website. Finally you must enter this **Activation Key** in the **Enter Activation Key** option of your application.

You must be logged in Windows as Administrator.

1. Open Porcitech
2. Click **File** in the main menu and then click **Enter Activation Key**
3. With the mouse, select **Machine ID** value, right click and select **Copy**
4. Open your web browser and log into in your Customer Space at www.agritecsoft.com
5. Click your **Pack** link
6. Click **Get Activation Key**
7. Put the cursor over the Machine ID box, right click and select **Paste**.
8. Click **Submit** button
9. Now your Activation Key is created in the same page, under Submit button. With the mouse, select the **Activation Key**, right click and select **Copy**
10. Return to Porcitech, at **Enter Activation Key** put the cursor over the edit box, right click and select **Paste**. If you are typing the Machine ID, make sure that you type zeros instead of the letter O. This mistake is very common and generates errors.
11. Click **Ok**

Common questions:

Is it necessary to have Internet in the same computer?

No, you can copy your Machine ID to other media (paper, USB memory, or have someone read it over the phone) and access your Customer Space from any other computer.

How does Agritec Product Activation work?

Product Activation works by validating that the software's product key, required as part of product installation, has not been used on more PCs than is allowed by the software's end user license agreement (EULA). Agritec applications can be installed on two computers per license. (For specifics, please see the EULA accompanying your product.)

Product key information, in the form of the product ID, is sent along with a "hardware hash" (a non-unique number generated from the PC's hardware configuration) to Agritec's activation system during activation. Activation is completed either directly via the Internet or by a telephone call to a customer service representative. Activations on the same PC using the same product key are unlimited. Product Activation discourages piracy by limiting the number of times a product key can be activated on different PCs.

Will Agritec use activation to force me to upgrade? Will Agritec ever stop giving out

activation codes for any of the products that require activation?

No, Agritec will not use activation as a tool to force people to upgrade. Activation is merely an anti-piracy tool, nothing else.

Agritec will also support the activation of its applications throughout its life and will likely provide an update that turns activation off at the end of the product's life cycle so users would no longer be required to activate the product.

I get an error when entering the Activation Key

- Make sure that you are logged in Windows as Administrator
- Temporally disable your antivirus program
- Make sure that you type zeros instead of letter O if there are. This mistake is very common and generates errors.

Do I need to enter the Activation Key in all computers if I am on a network?

Only one Activation Key is required for each database server. For example, if you have a network with a server and several computers as clients, you only need one Activation Key for the server.

3.6 Installing your farm database

After the software is installed, you will need to connect your database. The first screen you will see when you open Porcitec is the Database dialog. This dialog contains the list of databases installed on your computer, and options to manage them.

New farm database

There is an empty database included with the program, named MyData.fdb, that you will see in the database dialog. If you do not have a historical database converted by Agritec, you may simply begin entering data into this file.

If you prefer to create a new database using your farm name, or want to add additional farm databases, click **Cancel** at the Database screen and the program will open. Then click **File** in the main menu, and then **New Database**. Give the database a name and it will be created and added automatically. By default, each farm is a separate database file.

Converted farm database

If you had a database file from a former software program converted by Agritec, you received the converted file in a **backup** format (like MyFarm.fbk) and you will use the **Restore** procedure to connect the database. See Database restore.

Note that database files have a *.fdb extension, while backup files have a *.fbk extension.

For more detailed information, please see topic on **Database Management**.

3.7 Machine configuration

Under **File** menu, this option applies settings to the application, not the database.

User Report Folder

Defines the root folder of the user reports. User reports are report templates created by the report

designers included in Porcitech. Each report is a single file, placed in a subfolder of **User Report Folder**. By default, Porcitech places the user reports in a subfolder called **Default** that needs to be a child of the **User Report Folder**. Additional subfolders added to the **User Report Folder** will be displayed as different sheets in the Report Browser.

Databases Folder

Defines the database folder where the databases are placed. It is used for restore and new database function.

Landscape Printer Type

Some printers in landscape mode print left to right, while others print right to left. Some landscape reports use all space available and margins may be cut by some printers that need to respect a minimum margin at end of page. If your printer cuts some landscape reports, you need to change this parameter.

3.8 Upgrading from former versions

Upgrading Porcitech is formed by two steps:

1. Install Porcitech
2. Upgrade the database and/or files

To install Porcitech, see Porcitech installation. Note that it may be necessary to obtain a new License Code in some updates. Click the Get License Code link in your Customer Space on the Agritec web site. To upgrade the database and/or files, see the appropriate topic:

From Express/Demo version	See Upgrading from Express/Demo version
From 2009 SE or 2011	See Upgrading from 2009 SE or 2011 version
From 2009 version	See Upgrading from 2009 version
From 2006 and 2007 versions	See Upgrading from 2006 and 2007 version of Porcitech
From 2005 version	The steps are the same as upgrading from 2006 and 2007, but the original installation folder was C:\Program Files\Porcitech instead of C:\Program Files\Agritec\Porcitech
From non-Porcitech applications	See Database conversion.

Common questions:

Will installing Porcitech 2012 overwrite my former Porcitech application?

Yes and no. No, if the versions are different (for example 2009 and 2007). By default each version of Porcitech is installed in a different directory. For example Porcitech 2012 is usually installed in C:\Program Files\Agritec\Porcitech 2012. In this way, it is possible to have more than one version of Porcitech running in the same computer. There is an exception in network installation mode if two versions of Firebird are required.

Yes, if you are updating an existing version with a new revision of the same version, or a beta.

Will installing Porcitech 2012 overwrite my former Porcitech database?

No, the new database is placed in a new directory. Porcitech does not automatically update the former database. It is necessary to do a backup/restore operation, or to create a new connection.

Can I go back to using the former database?

No. Once the database is updated by opening it using a newer program version, you cannot undo the changes. You cannot remove the changes from the new database to the old database. It would be necessary to use the original database or restore a backup. **Always backup your database before installing a new program version.**

Where are the databases, backup files, and the custom user reports now saved?

Databases, backup files, and report designs are now stored in the **ProgramData** folder as defined by Microsoft Windows. The directory path depends on your version of Windows:

- Windows Vista: C:\ProgramData
- Windows XP or older: C:\Documents and Settings\All Users\Application Data

What happened to my custom User reports? Now the folder is empty.

See Upgrading from 2009 version

For simplification, this manual refers to the Windows Vista or Windows 7 definitions.

Databases are stored in %ProgramData%\Agritech\Porcitech\2012\Databases by default, however you can place databases in any folder that you want. Report designs are stored in %ProgramData%\Agritech\Porcitech\2012\Reports

Important Note: Custom report designs that are created by the user are saved in a separate folder and are not copied or backed up using the database backup function. It is strongly recommended that you manually copy this folder from time to time to an external storage source. This folder is located at the above directory path ...\\UserReports\\Default

3.8.1 Upgrading from Express/Demo version

This topic, like the manual, is written for commercial editions of Porcitech. Most articles pertain to both commercial and free editions, but if you are using the Free/Demo edition, not all will be exact. To upgrade your 2007 demo database to 2009 demo, please see the specific topic for the Free edition.

Important: Do not use copy to move database files from former versions. The database must be restored in order to rebuild the internal structure and update it to the new Firebird motor version.

The Free/Demo version does not include the backup feature so it is necessary to use the commercial edition of Porcitech to do a backup of the database and finally to restore it in order to rebuild its internal structure.

First, you need to know where you placed your database:

1. Start the Porcitech Free/Demo
2. Click **File** and then **Open Database**

3. Select the database that you want to convert and click **Edit Connection** button
4. Remember the values (database path, server, ...)

If you cannot open the Free edition then you need to know where the database is placed. You can use the Search tool of Windows to search *.fdb files (Porcitech database files)

Second, you need to do a backup/restore operation:

1. Start the commercial edition of Porcitech
2. The first screen is the database selection form, if not, go to **File** and then **Open Database**
3. Click **Add Connection**
4. Fill the form with the above values (database path, server, ...) and click **Ok**
5. Click **Open** button to open the database. It will be updated.
6. Click **File** and then **Backup**, do a backup of the database
7. In the main menu, click **File** and then **Restore**,
8. Select the database backup file in **Get Farm Backup From**
9. Select the current farm alias in **Restore Farm Backup To**
10. Click **Ok**

3.8.2 Upgrading from 2009 SE or 2011

Databases

Firebird, the database motor, has been updated to 2.5 version. If you are using a network installation, you must update Firebird to 2.5.

The database update is automatic. When Porcitech is opened for the first time, user database connections (paths) are automatically imported. Note that databases are not copied, just the connections (path).

User Reports

The update is automatic. When Porcitech is opened for the first time, user reports are automatically imported.

Handheld Device

If you are using a Pocket PC unit, please update your device to ".NET Compact Framework 3.5" and "Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile". Then install QuickData again. See Handheld computer chapter for more details.

3.8.3 Upgrading from 2009 version

Databases

The way to upgrade your former database is by using the Restore Database option to recover a backup created from the former database. This procedure will automatically restore the database to the new program directory path as explained above.

1. Open Porcitech 2009, click **File** and then **Backup**

2. Select the appropriate database
3. Select a **Destination Directory** for the backup file and click **Ok**
4. Open Porcitech 2012, click **File** and then **Restore**
5. Select the backup file from the location you just saved it to when you created it and then click **Ok**

Custom Report Designs

Current version of Porcitech uses a new folder to place the user reports. You must manually move the contents of your user folder to a new directory:

1. Open Porcitech.
2. Click Reports menu at top of your screen (not the icon).
3. Click **Open user report folder**. This opens Windows Explorer to the Porcitech directory.
4. You will see a highlighted folder called **Default**. This is where the user reports must be moved to.
5. Expand the /Reports folder above. Now you will see the old /US folder. Click on the US folder to see your user reports.
6. Copy the user reports from the /Reports/US folder and paste to the /UserReports/Default folder.
7. Close Porcitech and re-open and your user reports are restored.

Handheld Device

If you are using a Pocket PC unit, please update your device to ".NET Compact Framework 3.5" and "Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile". Then install QuickData again. See Handheld computer chapter for more details.

3.8.4 Upgrading from 2006 and 2007 version

Former versions of Porcitech placed databases and reports under **C:\Program Files** folder. This file organization has been eliminated by Microsoft from Windows Vista and replaced with **C:\ProgramData**

Note: **C:\ProgramData** folder is defined in Windows Vista. For Windows XP or older the folder is **C:\Documents and Settings\All Users\Application Data**

Databases

The way to upgrade your former database is by using the Restore Database option to recover a backup created from the former database. This procedure will automatically restore the database to the new program directory path as explained above.

1. Open Porcitech 2007, click **File** and then **Backup**
2. Select the appropriate database
3. Select a **Destination Directory** for the backup file and click **Ok**
4. Open Porcitech 2012, click **File** and then **Restore**
5. Select the backup file from the location you just saved it to when you created it and then click **Ok**

Important: Do not use copy to move database files from former versions. The database must be restored in order to rebuild the internal structure and update it to the new Firebird motor version.

Custom Report Designs

- The Data List report designer has been replaced. Porcitech maintains back compatibility with older user reports, so you can continue editing your existing custom reports using the former report designer. However, Agritec recommends you use the new report designer to create or modify new reports, and even to re-create your former custom reports. There is no converter to upgrade your user reports so former user reports cannot be exported to PDF format, unless you install PDFCreator for this purpose.
- A few variable names of Performance reports have been renamed to be more intuitive. It may be necessary to modify your custom performance reports according to the new names. If you receive an error trying to run an older user report, check the error message for the variable name and replace it with the new one. See Agritec Variable Dictionary.

To move your custom user reports to the new directory:

1. Using **Windows Explorer**, open C:\Program Files\Agritec\Porcitech\Reports\US folder
2. Select all files
3. Right click and select **Copy**
4. Open Porcitech 2012, click **Reports** in main menu and then click **Open User Report Folder**
5. Right click in the files panel and select **Paste**

Handheld Device

If you are using a Pocket PC unit, please update your device to ".NET Compact Framework 3.5" and "Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile". Then install QuickData again. See Handheld computer chapter for more details.

3.9 Network installation

3.9.1 Installation in network multi-computer environment

This type of installation is required when Porcitech will be used from more than one computer via a network.

The installation is formed by two components:

- Firebird application, which is the database motor used to access the databases by network
- Porcitech application, which is the herd management program

Firebird must be installed in the server computer where the databases reside. It is recommended that the server be assigned to the most powerful computer in the network. See Hardware requirements. Then Porcitech is installed in each user computer.

The complete installation is composed of 6 steps:

1. Download Porcitech and Firebird from your Customer Space
2. Install Firebird in the server computer
3. Install Porcitech in the user computer
4. Enter your License Code
5. Enter the Activation Key

6. Install your Porcitech databases in the server computer

If you do not have converted databases, you can copy empty Porcitech databases from the Porcitech installation. You can find MyData.fdb database, usually in C:\ProgramData\Agritec\Porcitech\2012\Databases directory. It must be copied in the server computer, renaming the file to an appropriate name.

After the installation, if you have a database, you need to create the connection. See Network database connection

Important for network installations:

- * ALL Porcitech installations must be done selecting the network option, including the installation of Porcitech in the server computer. An usual mistake is to install remote computers in network mode and the server computer as single user.
- * ALL remote database connections must be done selecting **Remote Server** option. See Open database
- * You do not need to install Firebird in the remote or satellite computers.

See also:

Open Database

3.9.2 Firebird installation

Firebird installation is only necessary for network environments. Do not install it if you have selected "Installation single user environment" mode in Porcitech installation.

Firebird is a relational database offering many ANSI SQL-92 features that runs on Linux, Windows, and a variety of Unix platforms. Firebird offers excellent concurrency, high performance, and powerful language support for stored procedures and triggers. It has been used in production systems, under a variety of names since 1981. Firebird is based on the source code released by Inprise Corp (now known as Borland Software Corp) under the InterBase Public License v.1.0 on 25 July, 2000

Notes:

- Firebird is only required in the server computer. Porcitech installation includes necessary files for the client side.
- If you plan to install Porcitech in the same computer with Firebird, you must install Firebird before installing Porcitech.
- If you install Firebird in a dedicated computer (without Porcitech), you must manually copy **AgrFireUdf.dll** file to the UDF Firebird directory, usually C:\Program Files\Firebird\Firebird_2_5\UDF. You can find this file in the Porcitech installation directory, under the UDF sub-directory.
- Porcitech 2012 requires Firebird 2.5 version. Please do not use higher versions because have not been tested.

IMPORTANT!

This installation package will try to detect if an existing version of Firebird is installed and/or running. You must either STOP the current server and/or remove the currently installed version before continuing.

To stop the Server

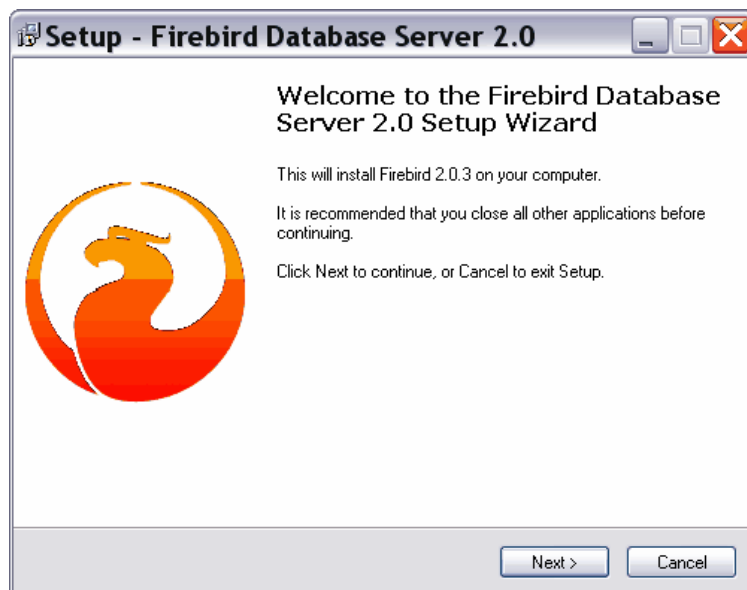
- If it is running as a service stop it via 'Control Panel | Services'.
- If it is an application just close it.

To remove an existing Server

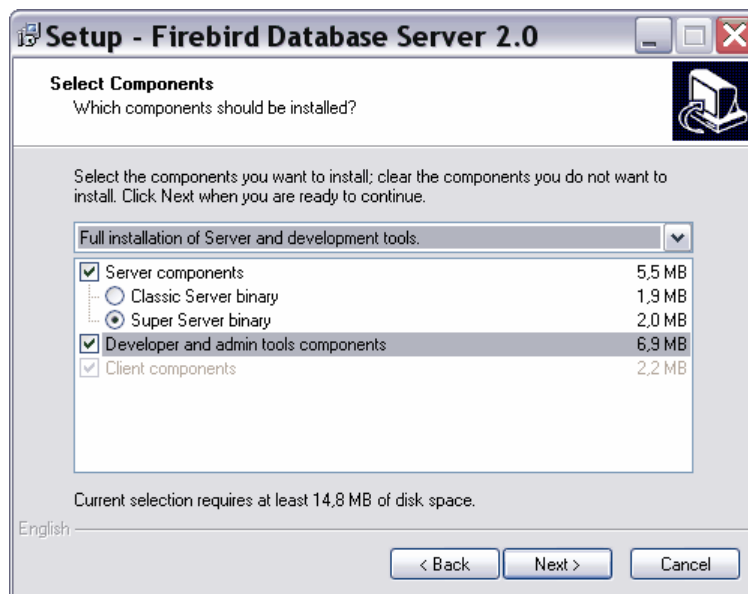
It is recommended that you uninstall a previous version of Firebird, but it is not a requirement.

Installation

1. Execute **Firebird 2.5** setup file. You can get it from your **Customer Space**.
2. Select the **Installation Language** and click **Ok**
3. Click **Next** button in the **Welcome** form

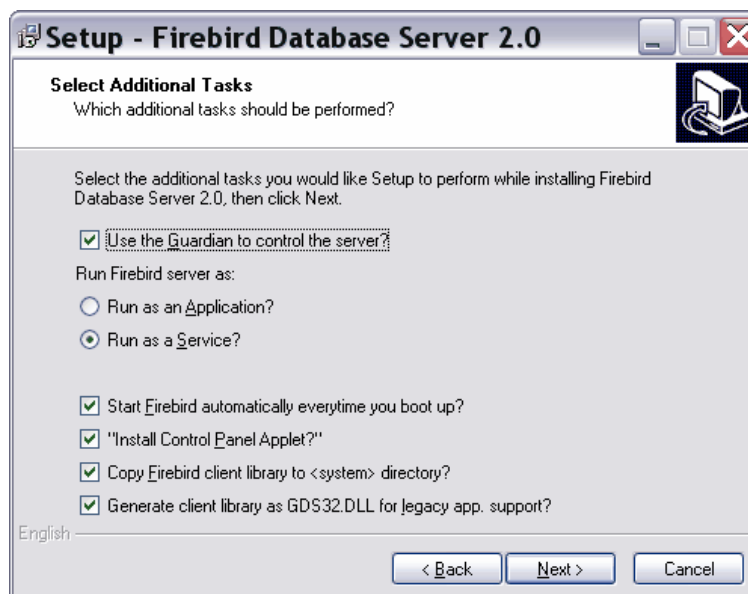


4. Read the License Agreement and select **I Accept** if you agree
5. Click **Next** button in **Information dialog**
6. In **Setup Destination Directory** select the directory where you want to install Firebird. Often the default directory is OK.
7. In Select Components dialog, select **Full Installation** and click **Next**



8. Click **Next** again in **Select Start Menu Folder** form

9. Click **Next** in **Select Additional Tasks** form



10. Click **Install** in **Ready to Install** form

11. Click **Next** in **Information** form

12. Click **Finish**



Checking that the Firebird server is running

After installation, Firebird server should be running as a service on Windows NT, 2000, XP, Vista or on Linux.

Windows NT4, 2000, XP and Vista

In Windows NT4, 2000 and XP, open Control Panel -> Services (NT) or Control Panel -> Administrative Tools -> Services (2000, XP, Vista).

Note: On Windows 2000, XP and Vista, the Guardian is a convenience rather than a necessity, since these two operating systems have the facility to watch and restart services.

Windows 9x or ME

On Windows 9x or ME Firebird server should be running as an application, monitored by the Guardian. The Guardian's icon should appear in the tray with a green graphic. If the icon is flashing or showing as a red graphic, it indicates that Guardian is either attempting to start the server or has failed.

If you used an installation kit that installed but did not automatically start the Guardian and the Firebird server, you can use a Control Panel applet to control the starting and stopping of the Firebird server.

See also:

Firewall information

3.9.3 Firewall information

If your computer uses a firewall other than the firewall that comes with the Microsoft Windows operating system (such as a firewall from a network router or virus scanner), and you share Porcitech database with a computer that is outside your firewall, Porcitech may not be able to open the port that is needed for database sharing to work.

If you have difficulty sharing your Porcitech database with users outside your firewall, you must open TCP port 3050. Check your firewall documentation to find out how to open this port.

3.9.4 Network database connection

Porcitech databases can be installed in one or more computers and accessed by users on remote computers in a network environment. This article will explain how to install Porcitech in a network. For this example, suppose the installation has 3 computers connected to a network:

Computer 1:

- Description: Placed in the central office.
- Computer Name: OFFICE

Computer 2:

- Description: Placed in the barn.
- Computer Name: FARM

Computer 3:

- Laptop used by the veterinarian.
- Computer Name: VET

The first thing to do is define the server computer. The server computer is where the databases and Firebird software are placed. Ideally it is the most powerful computer, and it must always be turned on when other users are using Porcitech. In the above scenario, we will designate the OFFICE (Computer 1) computer as the server.

The first step is to install Firebird in the OFFICE computer. Please see Installation steps for more information.

Then install Porcitech in the OFFICE computer, in FARM computer, and VET computer. **Important:** You must select **Network mode** during the installation of Porcitech for **ALL** computers in the network.

Copy the database or databases to the server computer, in this case, the OFFICE computer. By default, the folder is C:\ProgramData\Agritec\Porcitech\2012\Databases, but you can place them in any folder.

The final step is to create the database connections. For each computer (OFFICE, FARM and VET), do the following steps:

1. Click **File** and then **Open Database**

2. Click **Add Connection**

3. Select **Remote Server**

4. Enter the computer name in **Server** box, in this example **OFFICE**

5. Enter the **local path** of the server computer, for example C:\ProgramData\Agritec\Porcitech\2012\Databases\MyDatabase.fdb in **Path** box. (Replace MyDatabase by the name of your database)

6. Enter the name of the database in **Alias**

7. Click **Ok**

Important: Note that the path entered in the connection of **all** computers uses the **local path** of the **server** computer. This is the most common mistake people make when setting up their network. You must enter the local path of the server computer in all connections, remote and local. Do not enter mapped units, server names, or network units.

3.10 Recover from a disaster

When a computer crashes, (hard disk fails, computer death, etc.) you may want to reinstall Porcitech in another computer or even in the same one if it is repaired. The steps are:

1. Install Porcitech in the computer. See Installation steps. Agritec recommends installing the latest version of Porcitech, 2012.
2. If it is a new computer, restore the latest backup file of your database using the Restore procedure if your backup is current. The database will be automatically connected. Otherwise, execute Porcitech and create a new connection to the existing database. See Open database. If you do not remember the path, use the Windows Search function to search for .FDB files. Porcitech databases are files with FDB as extension.
3. If you created any custom reports, you must manually copy the reports from the former computer to the new one. The report files have RP as extension. Click Reports in main menu and then Open User Report Folder. Usually they are in a folder called "Default". Use the Copy and Paste function to copy the custom reports to the same folder in the other computer, or to copy them to a backup source.

Common Problems:

- If you cannot find the former database or it is corrupted, then you must use a database backup. If the database backup is not recent or you do not have a database backup, you must enter the data again.
- If you get an error message opening the database like "The database you are trying to open is newer than your program", you have not installed the latest version of Porcitech. Go to your Customer Space and download it.
- If you can open the database but you are missing recent events or it is empty, it means that you are opening another database or it is not the most recent version of your database. Search for FDB files in your hard disk and open them.

See also:

Database backup

Database restore

3.11 How to transfer the program and data to another computer

When you purchase a new computer, it is necessary to transfer the program and the database to the new computer. The steps are described in the next lines:

1. Install the program in the new computer. Please see Installation steps. This article includes the download process, license code and activation key instructions. Note: if you have already installed the program on two computers, you have used the 2 activation keys that are included with your license. You must contact Agritec to get another added to your Customer Space for your new computer.
2. Do a database backup in the old computer. You can use a memory stick to transfer the backup.
3. Restore the backup file in the new computer.
4. If you have created custom user reports, you must copy these report files to the new computer. Click Reports menu in upper left of your screen and then Open User Report Folder. Your user reports are in a folder named Default. Use the Copy and Paste function to copy the custom reports from the original computer to the identical folder in the new computer.

3.12 Installing Consultant edition in the same computer

In some scenarios, it is necessary to install the Enterprise and Consultant editions in the same computer. For example, a company with 3 separate 1000 Enterprise licenses on different computers plus one Consultant license for 3000 females.

It is necessary to execute the installation for each edition.

1. Execute the normal installation according to Installing Porcitech topic
2. Enter the License Code for the Enterprise edition. See Entering the License Code topic.
3. Create a **Shortcut** from your desktop to Ramat.exe application for the Consultant edition. You can copy the Porcitech icon from the desktop.
4. Click the new icon and right click.
5. Click **Properties**.
6. Add **-consultant** at the end of the Target box. The result would be "**<Installation Folder>\Ramat.exe**" **-consultant**
7. Click **Ok**

Now you have two icons in the desktop. One starts the Enterprise edition and the other one starts the Consultant edition.

3.13 Hardware requirements

Minimum requirements

Factors such as database size, number of concurrent users, network bandwidth, etc. will determine basic requirements, so the following hardware specification is a guide. Most computers since 2000 can manage Porcitech without any noticeable difference in computer performance when installed for a single user.

In network environments with several users accessing the database concurrently and a high load, we recommend a dedicated computer as the Firebird server. The best improvements in performance are obtained with a combination between the latest technology in the server computer, with a fast hard disk and a fast network. However, Porcitech can be executed remotely in a client computer with minimum hardware requirements.

High performance requirements

The following explains how to specify and configure hardware for maximum performance to adapt the system to high loads, such as large databases (thousands of females), multiple users, bureaus, and remote connections.

How many computers are needed?

For network environments with multiple users, the first item to consider is to install Firebird in an exclusive computer. It is generally unwise to run a second resource-intensive application such as Windows Terminal on the same server machine as the Firebird server.

CPU

Faster CPUs tend to deliver better performance. However, there are a few important points to consider. Hard disk performance tends to become a bottleneck before the CPU does. It is important to remember

that CPU speed is only one part of the performance equation.

Hard Disk

Selecting a fast and reliable hard disk drive configuration is one of the most important decisions to make when configuring a Firebird server. You will get better performance from a fast hard drive than just about any other server configuration, with the possible exception of networking hardware.

Hard disk drives can transfer data very quickly when they are reading adjacent tracks, but they must interrupt this transfer every time they need to find data on another part of the disk. For this reason, the Firebird server is designed to read data in storage order whenever possible. This works well when the Firebird server does not have to fight with another process for use of the disk. For this reason, it is a good idea to store the Firebird database on a separate physical hard drive. In a simple configuration, put the operating system and its virtual memory cache, along with all applications, on one drive and the Firebird database on a second drive. If you have more physical drives available, consider giving the virtual memory cache and the Firebird database cache each a drive to themselves

IDE vs. SCSI

There are no Firebird-specific reasons to choose one interface over the other. The faster the drive, the faster Firebird will perform.

RAID

RAID stands for Redundant Array of Inexpensive Disks. RAID controllers use multiple disk drives to increase speed, reliability, or both. Different RAID configurations provide different benefits. It is important to understand that some RAID configurations can actually hurt speed or reliability, so choose a system which meets your needs.

Again, there's almost nothing Firebird-specific that you need to know when selecting a RAID configuration. If you choose a RAID configuration designed to increase performance, such as RAID 0 or RAID 5, you will find that Firebird performance is boosted accordingly.

RAID configurations designed to increase HDD system reliability, such as RAID 1 or RAID 5, eliminate any need to shadow a Firebird database. There is no benefit to a database shadow with an appropriate RAID configuration, and the performance cost of a shadow and low dollar cost of HDDs makes RAID the better choice.

Memory

Memory is used as cache to improve the disk reads. Firebird can use a maximum of 2GB physical RAM, but if you intend to have Firebird use this much memory you'll need to install enough additional memory for OS functionality.

Networking

Networking hardware is a frequently overlooked but important component of overall Firebird system performance. Network bandwidth is frequently the first bottleneck. All machines in a LAN should use at least 100 MBPS Ethernet.

Operating System

While Firebird and Porcitech will run on Windows 98, and ME, they are not appropriate OSs for supporting a database server. Windows NT, 2000, XP, Windows Server 2003, Windows Vista and Windows 7 are all acceptable choices.

In terms of stability, the single most important thing you can do no matter which OS you use is reduce the number of other programs running on the Firebird server. It is recommended building the server machine from scratch (formatting all hard drives and reinstalling the operating system) when possible.

3.14 Renewing the License Code

It is necessary to renew the License Code periodically, even if you have Studio or Professional editions. For these editions the renewal is free of charge. Enterprise and Ultimate subscriptions must be renewed annually. See http://agritecsoft.com/faq?id=must_i_renew_my_license_perio

1. Go to <http://www.agritecsoft.com> web site
2. Click **Customer Space**
3. Enter your Email and password to authenticate you, then click **Enter**. You received this information in an e-mail sent to you when your created the order.
4. Click the desired pack (you may have more than one)
5. Click **Get License Code**
6. Be sure to select the correct license code version that applies to your installed version of Porcitech. You can see the version number in the top bar of Porcitech in the main menu screen or in the "About Porcitech" menu.
7. The License Code is sent automatically to your e-mail. Follow the steps at Entering the License Code topic

Wait 10 minutes to receive the E-mail. If you do not receive it, please check your anti-spam folder or verify that the E-mail address used is the one registered to your Agritec account. You can change your E-mail from your Customer Space panel.

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



IV

4 Database management

4.1 New database

This option creates a completely new and empty database for farms with no previous database or history. Click **File** in main menu and then **New Database**. Give the database a name and it will be created and added automatically. By default, each farm is a separate database file.

Note: If you had a database converted from another software program, or you are updating your current database to a new Porcitech version, you will create a **Backup** file of your database, then use the **Restore** command to install the database. The backup file must have a .fbk extension.

Creating a new farm on a network

It is not possible to create a new farm from a remote computer in a network environment. The **New Database** option only works when Porcitech has direct access to the database directory.

In a network environment, there are two ways to create a new farm:

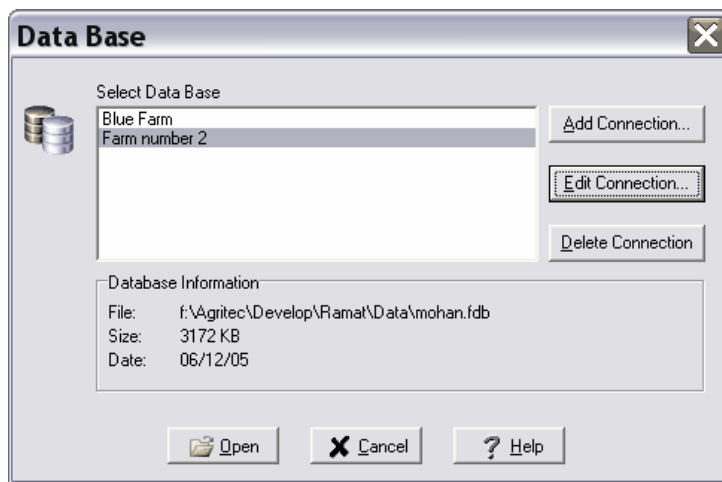
1. Install Porcitech in another computer in Single User mode. Create the new database, then copy the database (FDB extension file) to the appropriate directory in the server computer. Then create the connection to the new database by clicking **Open Database** in the **File** menu, then select **Add Connection** and type the path.
2. If Porcitech is installed in the server computer, you can create the new database directly and it is added automatically.

4.2 Open database

When opening Porcitech for the first time, you must define the database connections. This tells Porcitech the directory path on your computer or network where the database resides. Porcitech can work with one or more databases.

The **Open Database** option is used to select the farm to open, and to define the connections (path) of each database. A Porcitech database is a file with *fdb* extension, such as *Database.fdb* or *MyData.fdb*.

In Windows Vista or Windows 7, the database is located by default in the folder %ProgramData%\Agritech\Porcitech\2012\Databases. In Windows XP it will be located at C:\Documents and Settings\All Users\Application Data\Porcitech\2012\Databases

**Add Connection**

Add a new database connection. This does not create a new database. It only defines the location of the file on your computer or network.

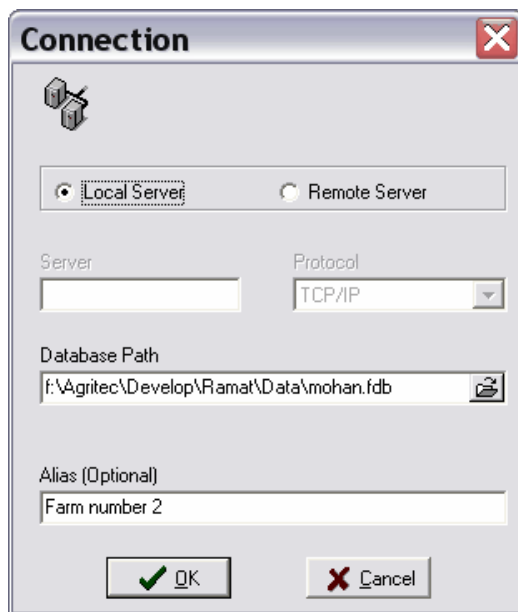
Edit Connection

Modify the database connection, if you have moved the file.

Delete Connection

Delete the database connection. It does not delete the database file, only the connection from the Connection dialog.

When you click **Add Connection** or **Edit Connection**, the Connection screen appears:

**Connection Type**

Type of connection to the database.

- **Local Server:** Direct connection to the database. This is usually used when Porcitech is installed in the same computer as the database.
- **Remote Server:** The client process uses a network protocol to connect to a server process, which then connects to the server database, so avoiding many problems with permissions encountered when connecting to a local database. The server may be located either on a remote computer, or on the same computer as the client, and the communication protocol used may be specified by the contents of the database string.

Server

Name or IP address of the remote server. Ask your network administrator.

Database Path

This is the full path to the database on the target server. For example C:\MyDatabases\BlueFarm.fdb.

Alias

Connection description, usually the farm name. It is the name that will be displayed in the Database dialog box when you open Porcitech. If it is empty, the Alias will be the Database Path.

IMPORTANT: The database path is the local path of the computer where the database is placed. Do not use mapped or network units in the path. Do not use the server name in the path or double slashes \\. You must enter the local path.

Note: By default Firebird uses Port 3050. If you are using a firewall, you will need to enable this port so users can access their databases externally. See Firewall information.

If you installed your database using the Restore command, the database will be added automatically and you will see the file name in the dialog list. If you need to connect a file you have moved, or copied to your computer, then please see How to set up for a single user installation? and How to connect to a database in a network installation?

4.3 Single user database connection

This example is for a single user environment and is the most common configuration. The database resides on the same computer as Porcitech, without a network installation. No other Porcitech applications are accessing the database from different computers. If you have installed Porcitech in network mode, please see Network database connection

To connect the database:

1.Click **File** and then **Open Database**

2.Click **Add Connection**

3.In **Database Path**, click the folder button

4.Locate the database file on your computer, for example C:\MyDatabases\MyDatabase.fdb . Select the database you want to use.

5.Click **Open**

6. Enter a descriptive name in Alias box, for example **My Blue Farm**

7. Click **Ok**

4.4 Database backup

The need to backup databases on a regular basis is a major component of managing any production system. Backups may be used to provide a means of recovery from a disaster situation.

It is highly recommended that all Firebird databases be backed up periodically. This provides the best chance of successfully recovering a production environment in the quickest amount of time in case there is a disaster situation.

Online Backups can be done with Porcitech. There is no need to shut down a database or to stop entering data in Porcitech in a network environment to backup. The backup process takes a snapshot of the state of the database at the moment it begins, so users can continue working while a backup runs, allowing 24x7 operation.

Porcitech includes the backup and restore option. Never make a direct copy of the Porcitech database file with the Porcitech program open and the Firebird services running, or any computer or application that might be accessing the database using tools or commands like copy, xcopy, Winzip, winrar. Not only will the backup be unreliable, but the disk-level blocking used by the copy file tools can corrupt a running database.

Note: Database backup does NOT copy the custom designed reports in your User folder. Custom reports are located in each client computer, not in the server. Click Reports in main menu and then Open User Report Folder and use the Copy and Paste function to move the custom reports to another computer, or to copy them to a backup source.

Select the Database to Backup

Check the databases to backup.

Destination Directory

By default, in Windows Vista the backup files are located in

C:\ProgramData\Agritec\Porcitech\2012\Backup

In Windows XP they are in

C:\Documents and Settings\All Users\Application Data\Agritec\Porcitech\2012\Backup

Backup files have the .fbk extension.

It is strongly recommended you copy the backup files from the Backup folder to an external media type as a CD, DVD or USB memory. Backup files must be restored using the RESTORE command, they cannot be simply copied into the Data directory.

In a network environment, the destination directory does NOT support mapped units, you must use the server name in a network environment.

Backup File Name

- **Keep Original Name:** The backup file name is the same as the database file name. Using this backup option will overwrite the existing backup file if it has the same name.
- **Add Date and Hour as Prefix:** The backup file will be given a new name formed by adding the date and hour to the database name. Use this option if you do not want any existing backup files to be overwritten. But keep in mind these files are quite large, and if they are allowed to accumulate, they will take up a lot of space on your storage drive or media. It is recommended to

periodically delete the older files manually.

Backup rotation scheme

A Backup rotation scheme is a method for effectively backing up data where multiple media formats are used in the backup process. A common example is the rotation of backup tape on a regular basis.

There are several methods. A simple method is called Incremental Backup. Basically the incremental backup is simply backing up onto the oldest media in the set. For example, with a daily backup onto a set of 14 media, you would have 14 days worth of individual daily backups. When all the tapes are used, the oldest one is inserted.

Important:

Only use the backup/restore option included in Porcitech or the specific Firebird utilities as per the information provided below. For companies with a strong backup policy, you can use external tools to automate the daily backups.

FIBS Firebird-Interbase Backup Scheduler

<http://www.softpedia.com/get/Internet/Servers/Database-Utils/FIBS-Firebird-Interbase-Backup-Scheduler.shtml>

See also:

Cannot attach to services manager

4.5 Database restore

1. In the main menu, click **File** then **Restore**.
2. In the box labeled **Get Farm Backup From**, click the combo button to open the File Browse dialog. Use this to locate the path of the backup file. The backup files have *fbk* extension. If you have backed up to an external drive or memory stick, you must type in the complete path. The backup file must be accessible by the computer where Firebird is installed. The path is relative to the PC where Firebird is installed.
3. In the box labeled **Restore Farm Backup To**, select where you want to restore the database using the drop down list.
 - **Add It Automatically:** This option automatically restores the backup file by creating a database file and adding the database connection to the Open Database dialog box. By default, in Windows Vista and Windows 7 the backup file will be restored to C:\ProgramData\Agritech\Porcitech\2012\Databases. In Windows XP it will be located at C:\Documents and Settings\All Users\Application Data\Porcitech\2012\Databases
 - **New Location:** It is similar to the **Add It Automatically**, but it allows you to define the database location. It can be in the local computer or in a remote computer. See **Add a Connection** in Open database.
 - **Database:** Select an existing database if you want to overwrite a database stored in the computer with the new backup. Make sure you want to do this because you will destroy the database.
4. Click **Ok**.
5. The restored database entry is created and added in the Open database list.

NOTE: Restoring a database to the server in a network

When you restore a database placed in a remote server, the local computer cannot delete the database to overwrite it. It is a restriction of the Restore feature.

You have two options:

1-Delete the file in the server before the restore, using Windows Explorer.

2-Use Porcitech to restore directly to the server. If Porcitech is running in the server, then it can delete the file.

See also:

Cannot attach to services manager

4.6 Rebuild database

This function recalculates all database variables. When a new version is released, some new variables may be added. These new variables will be empty and are only updated as you enter new events. To update them retroactively, this function needs to be executed. When a new version is installed, a popup dialog will appear to tell you to rebuild the database if it is necessary. Note that this option does not fix a corrupted database, it only updates variables.

All Records

Analyze all records in the database to update the variables.

Resume From Partial Rebuild

Large databases can take considerable time to rebuild. You can stop the process and resume using this option.

4.7 Clean Database

This feature permanently deletes all removed animal records from the database before a selected date in time. Because of the size and speed of computers today, it is usually not necessary to use this feature and it is not recommended. Your historical data will be irrevocably altered.

However if the database is very large and contains many years of obsolete data that you are no longer interested in, this feature can be used to "clean" it up. It is strongly recommended to backup your database before using this feature.

4.8 Execute Agritec Script

In some very specific cases, Agritec may need to customize the database for a customer. This option executes a script sent by Agritec to modify the database structure or data. It is not common to most users.

4.9 How to: Sync the data between two computers

A common scenario is to use a computer in the farm and another computer in the office but the computers are isolated and not on a network. How to keep the computers in sync:

1. In the source computer, go to File and then Backup.
2. Select the database to copy.
3. Place the memory stick in the Destination Directory and click Ok.
4. Take the memory stick to the destination computer.
5. Go to File and then Restore in the destination computer.
6. Enter the path of the backup file in **Get Farm Backup From**.
7. Select the desired connection in **Restore Farm Backup**. If it does not exist, you can create one.

See also:

Database backup

Database restore

Top Level Intro

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top-level chapter starts

Part

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5 Options menu: Adapting Porcitech to your farm

5.1 Options menu: Adapting Porcitech to the farm

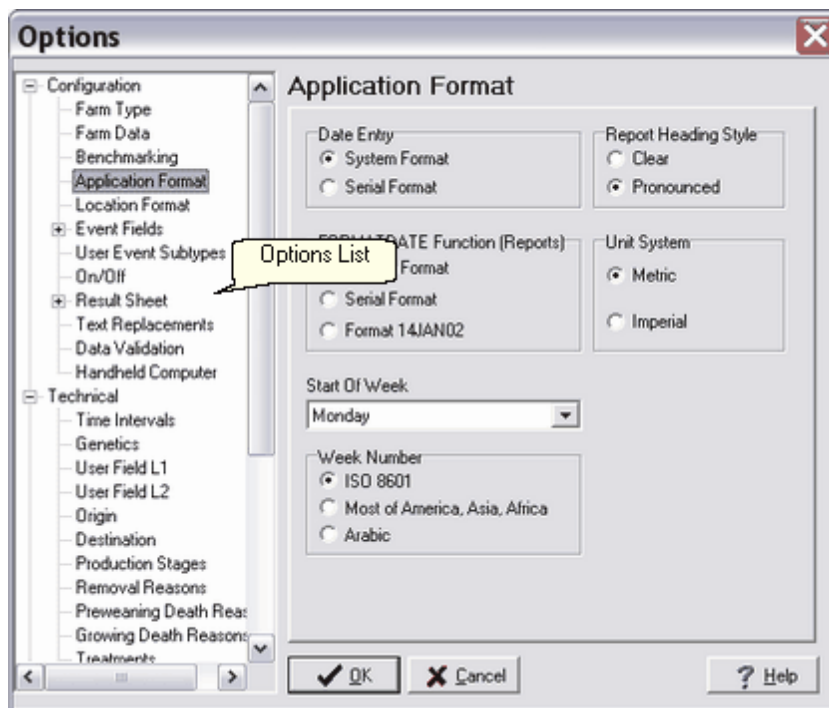
The first thing to do when setting up your farm is to select your preferences for program configuration in the **Options** menu. Here you will select program and reporting options and define the fields you want to use for events. It is important to review each option in the list. Although some may not pertain to your situation, many are important to enhance your data entry and reporting experience.

All options are farm specific; they only influence the active farm. If you have more than one farm database you will need to configure each farm separately. The main Options categories include:

- **Configuration**
- **Technical**
- **Feed**
- **Financial**

Each Option is explained in detail in this manual.

The **Options** menu can be accessed from the button on Porcitech's main menu, or wherever you see the tools icon in the program dialogs.



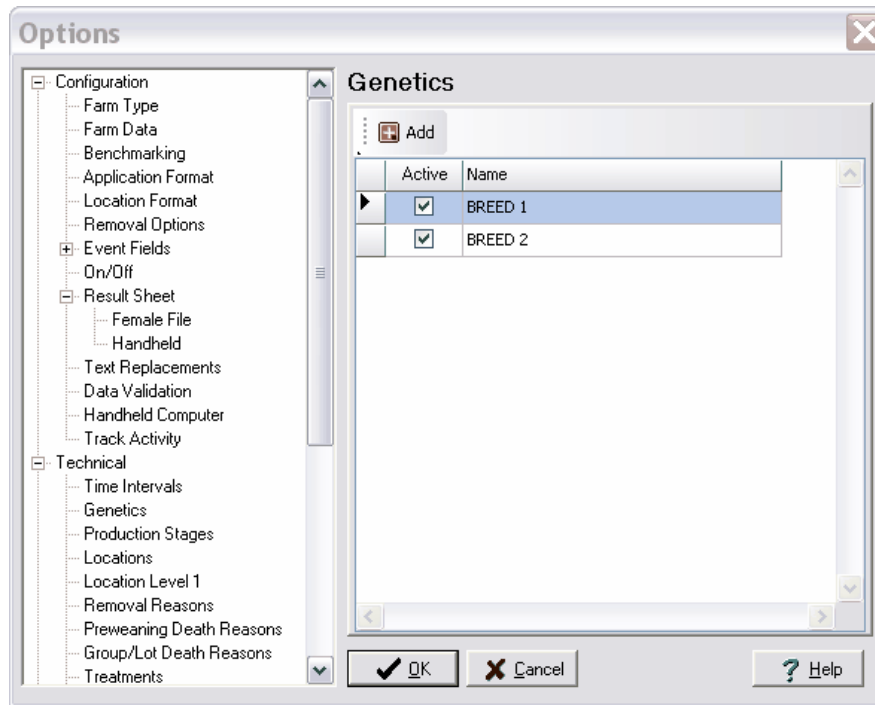
5.2 Defining codifications

Porcitech has support tables called codifications. For example genetics, feed IDs, or removal reasons are codifications. Codifications are farm-specific, and you can define as many or as few as you wish. For example, you can define 3 removal reasons or 50, depending on your requirements and what you want to see on reports.

These codification lists will display in drop-down boxes in data entry, so you can select the appropriate name (for example a genetics name when entering new animals with the Entry event). These names may also be used as a filter in reports.

Codifications are defined in **Options**. For example, the following screenshot is a simple Genetic codification.

Codification list



Active column shows the status of each codification. Active means that the code name will be available for selection in data entry. Some codes cannot be deleted for data integrity reasons. In this case you may hide the code name by right-clicking it, then select **Set as Inactive**.

Name column shows the name of the codification. It is the label that shows on reports.

Click **Add** button to add a new code name. Double-click, or right-click, to **Edit** the selected record. The next screenshot shows editing the record. If you edit a code name, the program will search the database and find and replace the old name with the new name in all records.

To **delete** a codification, right click the record and select **Delete** in the contextual menu. The **Delete** option is not available in all codifications. Porcitec will reject the deletion if the code is used in any database record and is necessary to preserve historical consistency.

Codification Edit

**Name**

Name of the codification, for example **BREED 1** if we are defining genetics, or **Low Productivity** if we are defining removal reasons.

Alias

Optionally you can define an Alias. You can enter a "code" of a few characters or numbers. Aliases are used to speed data entry by allowing you to type the alias instead of selecting the name. For example, when you enter a removal reason in data entry you can simply enter the first letters of the reason or type the alias.

Save and Close

Click this button to save the record and close the form.

Save and New

Click this button to save the record and add another one.

Cancel

Click this button to cancel the changes in the record.

See also:

Using Event Browser to merge codifications

5.3 Farm type

Here is where you select your farm type, or production system. For example, if your farm is breeding to wean only, the growing related segment will be hidden so as not to overwhelm the user with events and reports that are never used. The default setting is appropriate for most farms as it allows all options, events and reports.

5.4 Farm data

In this screen you may enter the identity and contact information for your farm.

Name of Farm

This is the farm name that will print on your reports.

Premise ID

The Premise ID is provided by the government or administration for the purpose of traceability of food producing animals. A premise is an identifiable physical farm location where activity affecting the health and/or traceability of food producing animals may occur.

Additional fields: **Contact Person, Address, City, State, Country, Telephone, email**

5.5 Premises

In a multi-farm environment, premises are the locations where animals are located. Usually a premise is a farm, but it depends on the organization of your company. Sometimes premises are used for traceability purposes. In these cases a premise is an identifiable physical location that represents a unique and describable geographic entity (where activity affecting the health and/or traceability of food producing animals may occur), or represents the producer contact location when extensive grazing operations exist.

Porcitech can manage multiple premises. A database may contain one or more premise, but often each premise is assigned exclusively to a unique database. Porcitech can work in two organizational models according to the requirements of your company:

A) All premises as one database

Useful when each premise has a low number of animals and the data is managed from the same site. A unique database is located in the central office. The codifications and options are shared by all premises. If it is required, any premise can install Porcitech in their computer and then create a remote connection to the central database via a local area network or Internet. The Client/Server architecture allows concurrent network access for users to edit records, print reports, and easily carry out simultaneous operations of any kind.

Any location is formed by up to 3 parts or levels separated by a dash (-). In some scenarios it is common to use the first level of the location to specify the farm or premise. The **Premises** option defines the premises or farms managed in the current database. Defining this codification allows you to filter reports by premise and display additional information related with the premise.

B) Each premise is a separate database

Useful when each premise has a high number of animals or the data of each premise is managed from several locations. In this model, each premise is a separate database. All codifications and options are created uniquely for each farm. The databases can be located in a single computer or in each farm location. This model allows a bigger autonomy for each farm because they do not need a network. However, by using a network, managers can install Porcitech in their computer and connect remotely to each database to access information or print out reports.

For multi-database reporting, the server computer is called **Data Center**. In a **Data Center**, only one database can be the **Master Database**. The **Master Database** is the only database that stores the list of the remaining databases or premises. This list (Options / Premises) is used for multi-database reports.

In most cases, the best model is to put each premise in a separate database, unless you prefer to share

the same configuration among all premises, or you want to show animals of several premises in the same reports.

Fields

Premise Name

Name of the premise

External Database Alias

Alias used in the database connection. See Database open. Fill this field only if your organizational model is One premise - one database.

Location Code

Location level 1. Fill this field only if your organizational model is several premises in one database. An animal is associated with the premise if the location level 1 of the animal matches the Location Code entered in this box. For example, the females placed in location A1-102 are associated with the premise when Location Code equals A1.

Premise ID

Premise ID, usually provided by the administration.

Address

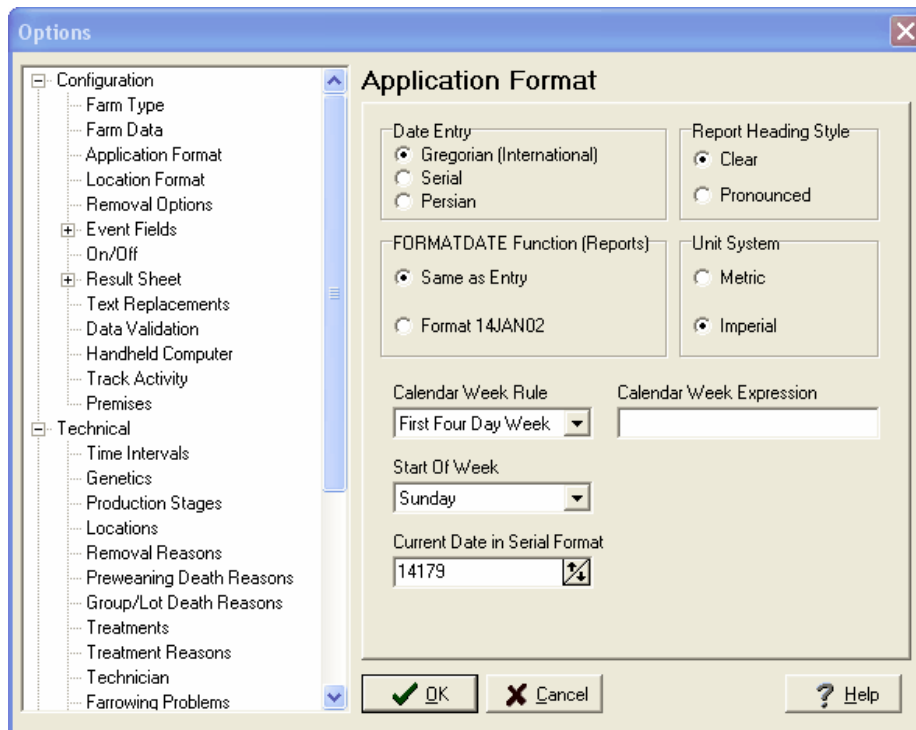
Address of the premise.

City

City of the premise.

5.6 Application format

In this section you will define the date format you prefer to use for data entry and reports.



Date Entry

Select the date format you prefer to use for data entry:

- **Gregorian:** Uses the day/month/year or month/day/year. Example: 8/16/02 (August 16, 2002)
- **Serial:** This date system is a numerical representation of the calendar. It is based on an integer number equivalent to the days that have past since a certain date, and is commonly called the **1000-day calendar**. Example: 11208 (June 4, 2002)
- **Persian:** Persian date system

FORMATDATE Functions (Reports)

Select the date format you prefer to have display on reports. Most reports use the same as entry, but you can modify this depending on your preferences.

Report Heading Style

This defines the heading style used when printing reports. **Pronounced** prints a black bar in the heading, **Clear** does not.

Unit System

Select the unit system that you want to use in reports and forms.

- **Metric:** The decimal system of measurement based on the meter and the gram.
- **Imperial:** The English units of measurements like pounds and tons.

Calendar Week Rule

Defines different rules for determining the first week of the year. Week number is used in some reports.

- **First Day:** Indicates that the first week of the year starts on the first day of the year and ends before the following designated first day of the week.
- **First Full Week:** Indicates that the first week of the year begins on the first occurrence of the designated first day of the week on or after the first day of the year.
- **First Four Day Week:** Indicates that the first week of the year is the first week with four or more days before the designated first day of the week.
- **Custom Expression:** Allows defining a numeric expression to calculate the week number.

Some examples of week calendars:

- **ISO 8601:** International Standard. Week 1 contains January 4. Week Rule: First Four Day Week, Start of Week: Monday
- **Most of America, Asia, Africa:** Sunday is the first day of the week. Week 1 contains January 1. Week Rule: First Day, Start of Week: Sunday
- **Arabic:** Saturday is the first day of the week. Week 1 contains January 1. Week 1 contains January 1. Week Rule: First Day, Start of Week: Saturday

Start of Week

This defines the first day of the calendar week. This day will vary according to the country, for example in Europe it will be Monday and in the US it will be Sunday.

Calendar Week Expression

Defines a numeric expression to calculate the week number when the **Calendar Week Rule** is **Custom Expression**. It is used by Agritec staff to customize the week rule. Please contact Agritec Software if you require a custom week calendar.

For PIC algorithm, enter **WeekNumberPic()** in Calendar Week Expression

Current Date in Serial Format

Defines the current date for the Serial format.

5.7 Location format

The **Location event** has 3 levels that can be named, for example, Barn, Room, Pen. If a farm only wants to record Location at the Barn level, the Room and Pen levels can be "turned off". These additional fields will not show in data entry for Location, which eliminates the need to move the cursor through unused data fields and saves keystrokes.

The location format you define applies to both breeding herd and growing locations. When using the Location event in Fast Entry or Batch, separate each level with a dash (-).

For example:

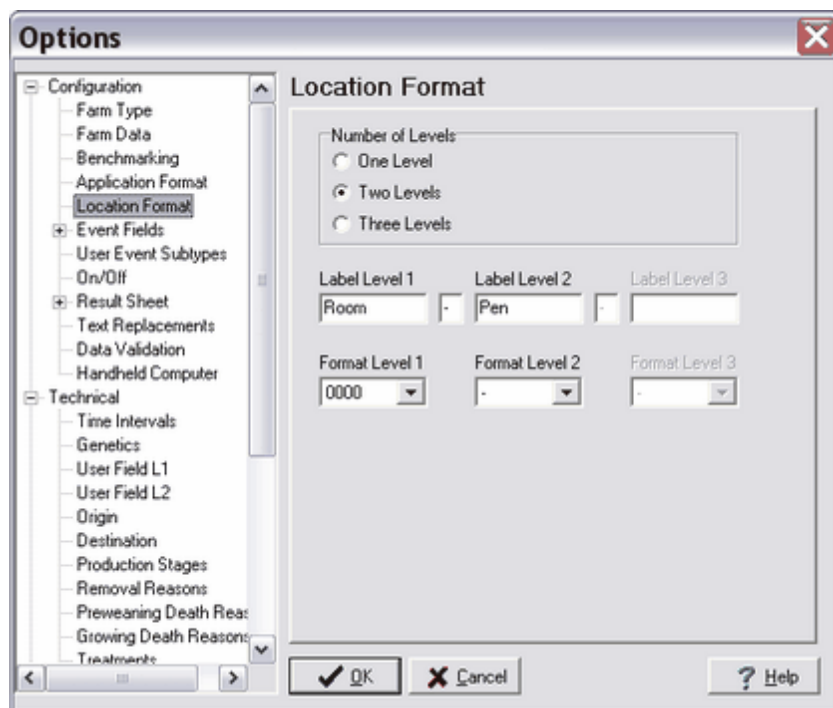
To define 3 levels (Barn-Room-Pen) use format FA-02-01

To define 2 levels (Barn-Room) use format FA-02

To define 2 levels (Barn-Pen) use format FA--01

You can use any combination of letters and numbers. The location field allows a total of 10 characters including the dashes.

Tip: When entering locations in Fast Entry you can save keystrokes by entering only the lowest level of the location in Location boxes. Porcitech reuses the location from the previous entry. For example, if the previous location entered is A-B-2, you can simply entry -3 and the result is A-B-3.



5.8 Removal options

You can easily reuse an animal ID code by automatically adding the year or other text to the animal ID with the **Removal** event. In this way IDs of removed animals can be used again in the future.

However, it is important to note that the field size of the animal ID is limited to 10 characters. Therefore be careful when choosing the number of additional characters to append to the ID. If your IDs of active females contain several characters and you try to append more than 10 total characters, you will get an error message and will not be allowed to do it.

For example, choosing current date option (yy-mm) adds 5 characters. If an active female ID is more than 5 characters and you try to add yy-mm you will get an error message.

Text to Add

Select the text to add to the animal ID when the removal event is entered.

Position

Select **Prefix** to add the text at the beginning of the ID, or select **Suffix** to add the text at end of the ID.

Another option is to modify a batch of ID's of removed females when needed by using **Modify Female Block**.

See also:

Modify female block

5.9 Event fields

Each animal file has a list of events that can be added to the animal record. In this section you can optimize the events for efficiency of data entry. Many events include several optional fields that can be turned on or off to display in the data entry screens.

You can select the data fields you want to use depending on the data you routinely record. For example, for herds that do not record litter birth weights at farrowing, this field can be "turned off" in the farrowing event by simply unchecking this field, which will speed data entry.

Additionally you can define new custom fields, expanding the data managed by each event type.

Name

Name of the event. Predefined events such as Mating or Abortion are not modifiable. Name can only be entered for User Events.

Alias

Alias for this event. You can type a code for the event to speed data entry.

Active

You can uncheck this option if you want to hide the event in Data Entry if you never use it.

Action

This option defines a specialized action when an User Events is processes. In most cases you can leave blank.

- **Bool1**: Set the user field Bool1 of the animal to true when the event is processed.
- **Bool2**: Set the user field Bool2 of the animal to true when the event is processed.
- **Bool1** in Individual, Sire and Dam : Set the user field Bool1 of the animal, its sire and its dam to true when the event is processed.

Minimum and Maximum

Some fields allow you to specify a range.

Enabling/disabling fields

Used to select or deselect the fields displayed for the selected event. You will see a list of fields pertaining to the event. Each field has three options: **Form**, **Batch**, and **Handheld**. A check mark in the field means the field is selected to display in the event and accept data.

- **Form**: Fields appear in Fast Data Entry and also in detailed form of Batch and Animal file.
- **Batch**: Fields appear in Batch grid2026
- **Handheld**: Fields appear in the handheld device.

New Fields

Each event can have up to 8 user fields. User Fields are useful to manage additional data that Porcitech does not include fields for. By default, Porcitech does not include pre-defined user fields for events. Click **New Fields** button to add your custom fields.

Active

Check On to activate the user field.

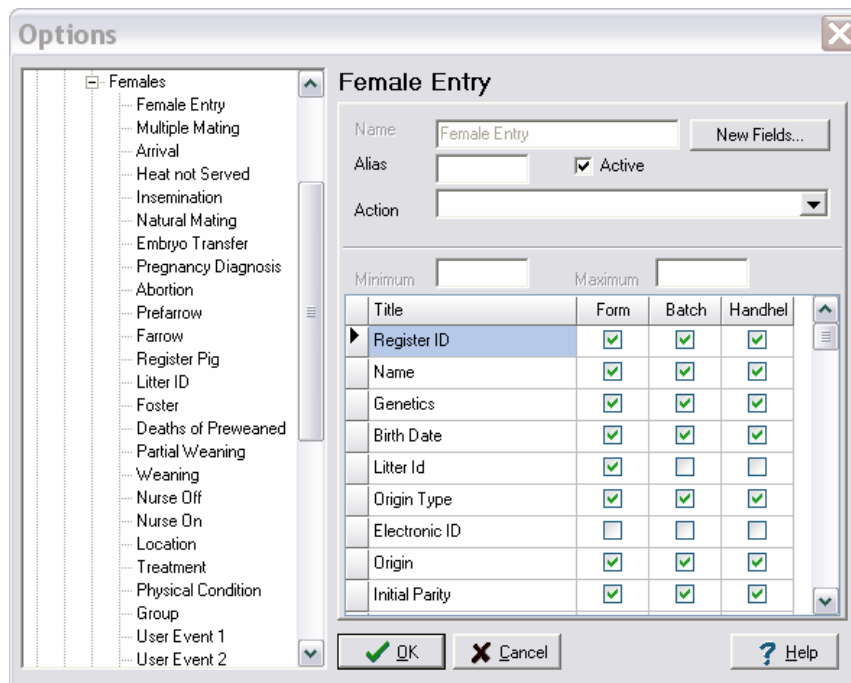
Type

User field type. Select the data type you want to enter in the user field:

- **Text:** User field with letters and numbers.
- **Numeric:** Numeric field.
- **Yes/No:** True/False.
- **Date:** Date format.

Title

Title of the user field. It will appear in the User Sheet.

**See also:**

How to use User Fields

5.10 On/off

On/Off in the Options menu contains a list of features and data validation options that can be turned "on" or "off" depending on the preference of the user. A checkmark indicates the feature is "on", or active.

Verify male identity in service

When entering natural service or insemination events, the program can verify the existence of the male

or semen batch used in the mating. Activating this option will help reduce data entry errors. However, entering the code of a male or semen batch into a mating event that has not previously been entered into its respective file will create an error message, and the mating event will be disallowed.

Deactivate (uncheck) this option if you choose not to code all the males or batches of semen.

Allow service event to served or (diagnosed) pregnant females

This is on by default. It allows additional service events to be added to the record of a female who has a first service event in her parity and a status of served or diagnosed pregnant, such as in the case of a female who returns to heat and is rebred.

Upon deactivating this option, a served female cannot be served again unless a negative diagnostic event is entered prior to another service.

Verify empty location in Location event

If this feature is checked, when the Location event is entered in Event Entry, the program will verify that the entered location has not already been assigned to another animal.

Allow a farrowing event if the mating event is missing

This is on by default to allow a user to enter an existing herd into Porcitech without requiring the entry of all historical data.

For an intact herd with complete historical data, or when entering a new herd, it is advisable to uncheck this feature to promote data integrity. This will require the user to estimate and enter a missing mating event that results in a farrowing.

Female cannot be slaughtered until treatment withdrawal time has expired

If this is checked on, a female cannot be removed from the herd with a removal type of slaughtered if she has a treatment event in her record and the withdrawal time has not expired.

Need to end lactation before removal

This is on by default to promote data integrity. It requires the user to enter a Weaning or Nurse Off event to a lactating female before a Removal event can be entered.

Reset location at weaning

This is on by default. It prevents a Location event entered at farrowing from displaying on reports once a Weaning event has been entered for a female. It assumes the female is given a new location at weaning, so her location will be empty until a new location event is added to her record.

Add Pigs to Individual file with Register Pigs event

The Register pig event is used to identify individual animals at farrowing. When this box is checked on, Pigs are automatically entered into the Individual animal file when a Register Pigs event is added in the Females file.

Automatically dry off the dam with Individual wean event

Porcitech allows you to add pre-weaned animals to the Individual file using the Register Pigs event in the Female file. Then from the Individual file you can wean each offspring individually. This option automatically adds the weaning event to the Female file when all individuals of the litter have been weaned.

Copy primary ID to Register ID when modified

When it is checked, the Change Field Value event copies the ID to Register ID (alternative ID) when the main ID is changed. This can be useful to track ID changes, or when replacement females with a temporary ID are later given a primary farm ID.

Show alert at first service if no heat not served event

Check on if you want to be alerted if there is no heat no service event recorded before first service.

Enter date cannot be earlier than Arrival date

The Arrival date of an animal can be found in the Current Status sheet of the animal file. The Arrival Date must be earlier than or equal to the Entry date for all events in the animal record to be counted in reports. This is checked on by default and reminds you to modify the Arrival date if the Entry date is modified. In the case of females transferred from another farm, you will want to turn this off. See Export females to another database

Add codifications if they do not exist when importing

When the data is imported from external files (Excel, xml, ...) or from a handheld device, it could contain codifications that do not exist in the receiving farm (genetics, techs, ...). Checking this option, the new codifications are added automatically to the receiving farm. This behaviour sometimes is not desirable, for example in a multifarm environment with a consistent and unique set of codifications.

5.11 Result sheet

When you open the Females file and select an Id code for a female, in her file you will see a folder tab called **Results**. Clicking on this tab will open a sheet containing two columns, one listing her reproductive performance for the current parity, and the other a summary over all her parities, or her lifetime average.

Most of the important parameters you would want to know about a female are listed here by default. You will see information pertaining to her farrowing and weaning performance, service results, farrowing rate, pre-weaning mortality, last service date, due date, etc., as well as her lifetime averages.

However, you may want to modify this list according to your preferences by adding or deleting the parameters of your choice. You can do this by selecting the Options menu and then **Result Sheet**.

To add a new variable: select the place where you would like the variable to display and hit the Insert key. A blank row will be inserted into the table.

To delete a variable, simply highlight the row you wish to delete and hit the delete key.

Title

Type the text for the title or caption that you want to appear in the Result Sheet to describe the variable.

Expression

Select a variable name or an expression, to display in the **Result Sheet**. Highlight the Expression column and click twice to access the drop-down box containing the list of variable expressions. Any variable of FemaleEx table can be used. See [Agritec Variable Dictionary](#)

Note there two types of expressions, according to the type of device. For the desktop application, you can use Agritec variable expressions, like *Services/Birthings*100*.

For the handheld application, you must use SQL expressions. For example "*StatusCode || '-' || (current_date - StatusDate) AS Status*". The above expression is a SQL expression and returns the status code and the number of days. For SQL expressions, the AS keyword is necessary.

Col

There are two columns, 1 or 2, displayed in the Result Sheet. You may choose which column you wish your new variable to be displayed. The rows of column 1 are displayed first, scroll down the grid to display the rows for column 2.

5.12 Text replacements

You can customize Porcitech by defining the terminology of some expressions by modifying **Text Replacements** in the **Options** menu.

Female File Information

When you open the Females file you will see a field to the right of the Id code that shows the female's current parity and status. You may add to, or change, the variables shown in this field if desired. In this row, type **%%variable name%%** to add a new variable.

You may add a label to describe your term by typing it next to the variable. For example, **Current Parity=%%CurParity%%** will show "Current Parity=4" if she has 4 parities.

Group/Lot File Information

The text replacement feature works the same way in Group/Lot File.

5.13 Data validation

Some numbers entered into an animal record are validated by Porcitech to help detect data entry errors before saving records to the database. You can specify the range of acceptable biological values that Porcitech will accept or reject in the Options menu under Data Validation.

5.14 Handheld computers

A handheld is a palm size computer, which can be used at the barn level to enter and/or consult farm data. Porcitech can manage one or more handhelds, even if they are of different brands or models, so the data to be entered can be shared by several employees. See [Handheld Computer](#). The first step to operate with HHC is defining them in Porcitech. Go to Options and then Handheld Computer in Porcitech. Click **Add** button to add new HHC.

Name

Name you wish to assign to the device.

Parameters

Usually you can leave it blank. It customizes some devices.

- **-EIDLEN:** For RFID readers, defines significant digits of the EID. For example **-EIDLEN:5** uses the 5 right digits of the EID

Model

Select the device model.

See also:

Install QuickData in a Pocket PC

5.15 Track activity

The Track Activity option is used to monitor changes to the farm database. It can be useful in multi-user environments. Any modification to the database is recorded in a table called LOG. You can consult the table using the Query wizard, in Reports.

Track Changes Modifying Events

Check On to track changes when an user edits events using the Animal file.

Track Changes Adding Events

Check On to track changes when an user adds events using the Animal file.

Track Changes Deleting Events

Check On to track changes when an user deletes events using the Animal file.

See also:

Log table

Track activity query

5.16 Time intervals

In this section of the **Options** menu, you will set the time intervals, or targets, for the tasks that will define your **Management Reports**. The intervals are the number of days from one event date in an animal's record to a subsequent event date. When generating a management list, it will show when females are due for a particular task, or change in status, at the interval in days you have defined.

For example:

If you routinely check for pregnancy at 35 days from service date, in the row for **Days from service to preg. check** type < 35 >. Then when you generate a **Served: Pregnancy Check** report you will see a list of females due for this test 35 days after their service date.

These intervals are also used for other reports, such as the **Female History Card**.

The following is the list of event intervals that may be user-defined for reports:

Days from weaning to first service

Enter the number of days from weaning to first service, this value is used in management reports.

Days from service to heat check

The default is set at 21 days and is used for the Served: Heat check report.

Days from service to pregnancy check

Enter your target days to check for pregnancy for the Served: Pregnancy check report.

Days from first pre-farrowing to farrowing>

Enter the days pre-farrowing for the first pre-farrowing task, such as vaccinations, for the Served: Pre-farrowing report.

Days from service to farrowing control

Enter the average gestation length in your herd for the reports Served: due to farrow and Female History Card.

Days from farrowing to wean

Enter your target weaning age for the Farrowed due for weaning report.

Age in days to enter breeding herd

Enter the age of the animal in days to enter breeding herd.

Age in days to first service

Enter your target age for the service of replacement females for the Unmated females entered report.

See also:

Management reports

5.17 Genetics

In this section you will code the existing or aquired genetic lines or breeds on your farm.

See also:

Defining codifications

5.18 Production stages

Any production system comprises one or more distinct phases or stages. In this section of the **Options** menu you may define the production stages used on your farm. It is optional, but we advise you to use it if you want information breakdown by production stage of group. The stages you define can then be used as a filter for reports.

Note: Production stages should not necessarily be defined by location. For example if you separate finishing animals by sex for feeding into two locations, the stage is considered finishing for both groups. Do not create a separate "female" and "male" finishing stage. Consider that production stages can be used as higher level filters in reports when several locations may be combined.

Fields

Name

Stage description

Alias

Alias of stage to be created

Category

Each stage must be related to one of three main categories: breeding, nursery, or finishing.

Some Definitions as Defined by the National Pork Board:**Production Stages**

Any production system comprises one or more distinct phases or stages:

- Breeding herd
- Nursery
- Finisher

Each stage produces a measurable output:

PRODUCTION STAGE	OUTPUT
Breeding	Weaned Pigs
Nursery	Nursery Pigs
Finisher	Finisher Pigs

Segments

The above stages can include the following segments:

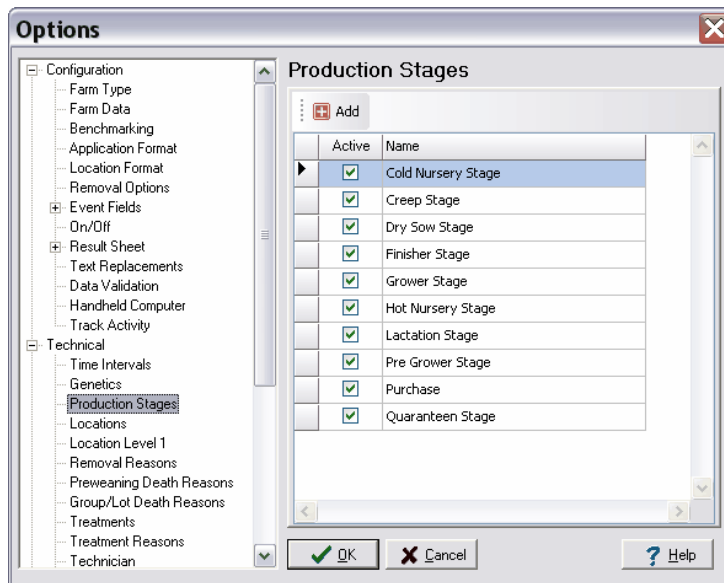
- Breeding production stage
 - Acclimation of entered breeding females
 - Mating
 - Gestation
 - Lactation

Note: Prospective, or future, breeding females that are still being raised as other growing Pigs destined for meat production are not included in the breeding stage.

- Nursery production stage
 - Hot nursery
 - Cold nursery

Note: The nursery stage can include Pigs up to 70 pounds live weight. However a farm is not required to define a nursery stage, Pigs can move directly from the breeding stage into the finishing stage when weaned.

- Finisher production stage
 - Pre-grower
 - Grower
 - Pre-finisher
 - Finisher



See also:

Defining codifications

5.19 Locations

This defines the locations of the farm. It is only necessary to define locations if you use Group File, automatic feeding systems, or RFID for locations.

Location

Location ID.

Capacity

Number of head allowed in this location.

Stage

Related stage for this location. A group can be defined by its stage of production. For example, a **nursery pig** may be up to 70 lbs live weight, then may move into the **finisher** stage. In some farms there may be only one stage defined, for example Pigs can move directly into the **finisher** stage at weaning. You may want to create a stage for **breeding** to record the purchase of replacement females and the sale of breeding culls. You may define several stages (hot nursery, cold nursery, pre-grower,

grower, pre-finisher and finisher). This system is flexible enough to be applied to any management system. **Production Stages** must be predefined in the **Options** section. When you create your Group, its stage is tied with the group using the current location.

EID

Electronic ID for the location. The RFID handheld can read location values directly from the transponder instead of typing them.

Location Managed by Automatic Feeding System

Some Automatic Feeding System devices need location information. Check this box to send the location data to the device.

5.20 Removal Reasons

In this section you will code the various reasons that animals are removed from the herd. Enter the most common reasons for culling and deaths for both breeding and growing animals.

See also:

Defining codifications

Using Event Browser to merge codifications

5.21 Preweaning death reasons

In this section you will code the various death reasons of pre-weaned animals.

See also:

Defining codifications

Using Event Browser to merge codifications

5.22 Treatments

In this section you will code the **Treatments** used on the farm. These will include any medications or vaccinations used to treat or prevent any disease or injury.

Name

Enter a name for the treatment.

Description

Optionally you may enter a description for the treatment.

Alias

Alias of name for data entry purposes.

Application

Define the application type: drinking water, oral, feed, injectable.

Route

If the application is injectable, then the route of administration is required.

Dose

Enter the dose and type of units.

Withdrawal

Number of withdrawal days required before slaughter.

Withdrawal 2

Some scenarios may require the use of two withdrawal numbers. It is used in the treatment report.

Heat Induction

Check this if the treatment is for heat induction.

Last Receipt

Last receipt used by this treatment. It is updated in treatment events.

See also:

Defining codifications

Using Event Browser to merge codifications

5.23 Reasons for treatments

Reasons for administering a treatment, such as illness, injury, anomalies or deficiencies.

See also:

Defining codifications

5.24 Technician

You can define the workers or technicians on the farm which can then be used as a filter to monitor and compare performance, or to record the observer of certain events.

Events that allow for the entry of **Technician** code are the mating events: Artificial Insemination, Natural Mating, and Embryo Transfer. There is also a Technician field in the events for Pregnancy Diagnosis and Treatment.

See also:

Defining codifications

5.25 Farrowing problems

Code all the problems of farrowing which may occur on the farm, such as death, cesarean, assistance, etc.

See also:

Defining codifications

5.26 Induced farrowing

There is an optional field included with the farrowing event labeled **Induced**. In **Options** you may code this field as simply "Yes" or "No", or you may want to code for the day of gestation, or hour of the day the female is induced.

See also:

Defining codifications

5.27 Heat observations

In the **Heat Not Served** event, there is a field labeled **Observed Heat** for coding observations or management tasks related to an observed heat event.

See also:

Defining codifications

5.28 Weight adjustment

Porcitech will adjust the weight for up to three standardized ages when entering animal weights using the Physical Condition event in Females, Males, or pig) . You can define the target ages for weight measurements in Adjustment Days 1, 2 and 3. If the animal is not weighed on the precise date of the target age, the weight will be adjusted to the number of days specified.

5.29 Nutrients

If desired, you may code and define the nutrient composition of feed and the units of measurement in this section.

Examples of nutrients can be protein, fat, fiber, calcium or lysine.

See also:

Defining codifications

5.30 Feed or ingredients

Here you will code all complete feed or ingredients used on the farm if you want to monitor feed usage and growth performance. List all complete feed and any ingredients, supplements, and medicated feed that may be combined to create a ration.

Do not enter ration IDs here. Formulate your rations in the **Rations** sections, using the ingredients you entered here.

Cost and **Inventory** of each feed and ingredient is entered in **Adjust Feed Cost and Inventory** in the **Farm** menu, or you may enter feed purchases in the **Account Register** in **Financial** if you wish to control the value and amount of feed in inventory.

Optionally, you can define the nutrient composition of the ingredient. Nutrients must be defined previously in the **Nutrients** option. Enter the **Nutrient** and **Act** (nutrient amount according to the units) for each nutrient that forms part of the ingredient.

For example, for Barley ingredient, you can define:

Nutrient	Units	Act
Weight	Kg	1
Dry matter	%	86
Metabolized Energy	kc/kg	2950
Total dissolved nutrients	%	75
Protein	%	12
Fat	%	2
Fiber	%	8
Ash	%	0.5
Calcium	%	0.07

See also:

Defining codifications

5.31 Rations

This section is used by farms that formulate their own feed rations on farm. Rations are blended on farm from various raw materials and additives, which must first be entered in the **Feed or Ingredients** section in **Options**. If you purchase complete feed, you do not need to use this section. By defining **Rations**, Porcitech allows you to calculate the ration cost and feed usage from the ingredients and the ration formulation you have defined.

1. To create a ration, click **Add**.
2. Enter a **Name** for the ration, for example Nursery Ration1.
3. List the name of each Ingredient and the weight per batch. In the Ingredient field, you will get a drop down box with a list of the ingredients you have previously defined. The sum of all ingredient weights that you enter will equal the **Total** weight.

4. Click **OK**

For example, for *Breeder Ration* you can define:

Ingredient	Weight
Wheat	140
Barley	665
Soya Meal 46.5%	130
Canola Oil	10
Dry 55 Premix	55

Least-Cost Feed Formulation

Rations module can also calculate the formula according to the Least-Cost Feed strategy. See Least-cost feed formulation

The Ingredient sheet in Options allows you to enter the Minimum and Maximum weight for each ingredient. Additionally you can specify the minimum and maximum units for some specific nutrients in the Nutrient Constraint sheet. Finally click the Formulate button to calculate the weight for each ingredient. The ingredient weights are calculated according to the Least-Cost Feed Formulation strategy and the restrictions specified in the Ration.

If formulation is not required, you can ignore the min/max column of Ingredient sheet and the Nutrient Constraint sheet.

See also:

Ration event

Least-cost feed formulation

5.32 Buyers

In this section you may code the **Buyers** you sell animals to for the financial module. Coding your buyers will allow you to filter reports for total sales by customer per time period.

See also:

Suppliers

5.33 Suppliers

In this section you may code your **Suppliers**. Suppliers are the sources, or **Origin**, from which you purchase animals, feed, machinery, or any other expense for your farm that you want to record for the financial module. Coding your suppliers will allow you to filter reports if desired by **Origin**.

See also:

Ration event

5.34 Accounts

In Porcitech you can keep track of your income and expenses, profit and loss, and know your cost of production. An **account** is the category you assign to each item of expense or income. In this section of **Options** you will code your sources of income and your expenses for the farm.

Id

The code you assign to the item.

Name

Name of the item.

Description

Long description of the item.

Group

Select the general predefined account the item applies to.

Type

Select if the item is an Income or Expense, or a subcategory of another account.

See also:

Defining_codifications

Top Level Intro

This page is printed before a new
top-level chapter starts

Part

A large, light gray circle containing the Roman numeral 'VI' in white, bold, sans-serif font. The circle is positioned to the right of the 'Part' text and the horizontal line.

VI

6 Entering data in Porcitech

6.1 Data entry methods

Introduction

There are three ways to enter data into Porcitech. The efficiency of each method is determined by the process of data collection and input, for example if data will be entered directly from barn cards, batch event forms, or is collected using a handheld computer.

Event Entry

Choose from multiple data entry options for the easiest and most efficient way to enter data. Choose from Fast Entry or Batch Entry. See Event Entry.

Animal Files

The Animal Files are primarily used to consult an animal historical record and to edit events in the record. They consist of five separate files, one each for Females, Males, and Semen in the breeding herd, and two for the growing herd: <%GROUP/LOT%> and Individual Pig Records. These files are ordered by the animal or Group/Lot Id code and contain all the events in an animal or group/lot record. See [Edit events using Animals file](#) section.

Handheld computer

A handheld is a palm size computer, which can be used to enter and/or consult farm data at the barn level. See [Handheld Computer](#) section.

Automatic handwriting recognition

ICR (handwriting recognition) technology can be used to scan data collection forms and enter the data automatically into Porcitech.

See Automatic handwriting recognition

6.2 Event entry methods

Event Entry is a fast and efficient way to enter data into animal records. Press the **Event Entry** button on the Main menu, or **F4**, or click **Farm** and then **Fast Event Entry** to access to this option.

Event Entry offers 3 modes to enter data depending on your methods of data collection and your preferences.



Fast Event Entry

Data entry is by ID code. This may be the easiest and most efficient way to enter data, especially when entering multiple events, such as from individual animal barn cards. The data is instantly assigned to the animal record as it is entered. You must use the appropriate Animal file for editing data.



Batch Event Entry

Data entry is by single event. Because of Porcitech's unique grid structure, data fields common to many animal records can be quickly copied, replaced, or filled, similar to a spreadsheet. Data is entered by selecting a single event that may be common to multiple animals, such as a pregnancy check, insemination, or entry into the herd. The data is not assigned to the animal record until you click the **Process** button. Once data is processed, it cannot be edited in Batch Entry. You must use the appropriate Animal file for editing data.



Pending Processing

Multiple events for the same animal can be added to the grid. The data is not assigned to the animal record until you click the **Process** button. Once data is processed, it cannot be edited in Batch Entry. You must use the appropriate Animal file for editing data.

Please see Data entry time-saving tips for optimizing data entry.

Event Entry

Fast Event Entry

1. Entry mode selection buttons.

2. Select the animal type: female, male, individual or group.

3. Form to enter event data.

4. History panel: The animal history is displayed in the right panel. You can double click to edit an event.

5. Animal panel: Current status data is displayed in the bottom panel.

Date	Type	Description
09/02/07	Inseminat	Semen: 8 Dose: 5
12/02/07	Inseminat	
12/02/07	Inseminat	Semen: 595
12/02/07	Inseminat	
12/02/07	Inseminat	Semen: 595 Dose: 3
12/02/07	Inseminat	Semen: 595 Comment:
12/02/07	Inseminat	Semen: 4312 Dose: 5
12/02/07	Inseminat	Semen: 595
12/02/07	Inseminat	Semen: 595 Dose: 122
12/02/07	Pregnanc	Result: Positive Test
12/02/07	Inseminat	Semen: 595 Dose: 4 H
13/02/07	Inseminat	Semen: 595 Dose: 4 C
13/02/07	Inseminat	Semen: 595 Dose: 4 C
13/02/07	Inseminat	Semen: 595 Dose: 4 C
13/02/07	Inseminat	Semen: 595 Dose: 4 C
13/02/07	Inseminat	Semen: 595 Dose: 4 C
13/02/07	Inseminat	Semen: 8
13/02/07	Inseminat	Semen: 8
14/02/07	Inseminat	
14/02/07	Inseminat	Semen: 56

Id	Location	Age	Farrow
5074	0443		2

- 1 Entry mode selection buttons.
- 2 Select the animal type: female, male, individual or group.
- 3 Form to enter event data.
- 4 History panel: The animal history is displayed in the right panel. You can double click to edit an event.
- 5 Animal panel: Current status data is displayed in the bottom panel.

See also:

Fast Event Entry

Batch

Data entry time-saving tips

Farrowing

6.3 Fast Event Entry

This may be the easiest and most efficient way to enter data, especially when entering multiple events, such as from individual animal barn cards. The data is instantly assigned to the animal record as it is entered. You must use the appropriate Animal file for editing data.

Press the **F4** key, or click **Farm** and then **Fast Event Entry**. Another options is to click the **Event Entry** button on the Main menu, then click the **Fast Event Entry** button.



Select the appropriate animal file and fill in the event form.

See an overview video at http://agritecsoft.com/en/porcitech/videos/fast_entry/fast_entry.htm

Fast Entry was designed for use of the keyboard. It is much faster and less tiring than using a mouse for data entry.

This entry mode has been optimized to enter data very quickly and intuitively. The **Enter** key is the only key needed to move to the next field. When you press the **Enter** key after the last field of the form, the data is immediately validated and saved to the record if there are no errors.

The **Font** button changes the font size of the event form. Click this button until the font and field boxes are sized to your preference.

Date	Type	Description
12/02/07	Inseminat	
12/02/07	Inseminat Semen:	0123
12/02/07	Inseminat	
12/02/07	Inseminat	
12/02/07	Inseminat Semen:	3452 Dose: 3
12/02/07	Inseminat Semen:	595
12/02/07	Inseminat Semen:	4312 Dose: 3
12/02/07	Inseminat Semen:	5667 Dose: 3
12/02/07	Inseminat Semen:	5667 Dose: 3
12/02/07	Inseminat Semen:	4312
12/02/07	Inseminat Semen:	4312 Dose: 4
12/02/07	Inseminat Semen:	4312 Dose: 4
12/02/07	Inseminat Semen:	595 Dose: 3
12/02/07	Inseminat Semen:	4312 Dose: 4
12/02/07	Inseminat Semen:	4312 Dose: 4
14/02/07	Inseminat Semen:	625

Id	Location	Status	Farrow
4074		S	0

Tips:

- The animal ID list is automatically filtered as you being typing the ID.

- The date is automatically filled entering only the day number as minimum. For example, if you enter 12, Porcitech will use the month and year used in the previous record. If you enter 1203, Porcitech will use the year from the previous record.
- Type the first letters of the event type to select it. Another efficient way is by typing the event Alias. See Events
- When entering locations you can save keystrokes by entering only the lowest level of the location in Location boxes. Porcitech reuses the location from the previous entry. For example, if the previous location entered is A-B-2, you can simply enter -3 and the result is A-B-3.
- You can press the Alt+S keys to quickly save the event data without having to press the Enter key through every field if the fields contain the same data as the previous event. For example, if you are entering multiple inseminations and the only field that you want to modify is the date, you can modify the date, then press Alt+S to save the event into the record.

See Data entry time-saving tips for more tips.

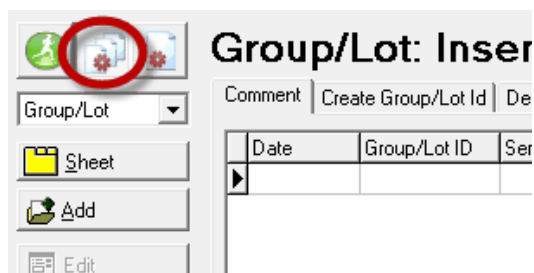
PLEASE NOTE: Fast Entry is for adding data only. Animal records cannot be edited from this window. To edit a record, simply click the Consult button in the left panel to access the animal file for editing. When you are done, click F12 twice to save the changes and return to Fast Entry.

See also:

Event Entry

Data entry time-saving tips

6.4 Batch Event Entry



Batch data entry works similar to a spreadsheet and is very efficient for entering large amounts of data. Batch entry is event driven and is best used when a group of animals shares the same event, such as entry, matings, pregnancy checks, treatments, weaning, etc. Fields of data can be copied to other records, or entire columns filled with any value.

See an overview video at http://agritecsoft.com/en/porcitech/videos/batch_entry/batch_entry.htm

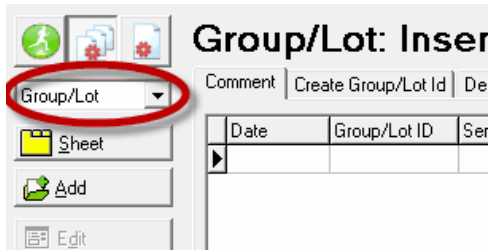
Batch entry is only for entering data. You cannot edit an animal file from the grid. To edit or consult an animal record from Batch, click the **Edit History** button in the left pane to bring up a record from the Animal file for editing.

In the main menu, click **Farm** and then click **Batch Event Entry**. There are two ways to enter data in Batch Entry: directly into the data entry grid or by using the Edit Detail dialog box. You can interchange the entry method as desired. The two methods are compatible and either method will transfer the entered data into the animal's record.

Buttons and controls

Animal Type

Select the animal file (female, male, individual or group)



Sheet

Select the event from a list.

Add

Add a new event.

Edit

Edit the selected event before it is processed.

Replace

The real advantage of using the Batch grid method is to copy fields of shared data into the records of other animals in the batch. Using Replace, you have the option to copy all fields except the ID code from the first record into all others, or you can replace a single column with the same field data into all records in the column. Typical examples are the Date field when all females are weaned on the same date, or the Semen field if all females are inseminated using the same semen code.

Any data fields that are shared with the entire batch or group of females, such as date, breed, group, semen code, technician, etc. can be copied to the fields of other animal records using the **Replace** button.

Fill-In

By selecting this button you have the option to fill the grid by duplicating the data entered into the fields of the first row, to any number of additional rows, and increasing the ID code by 1. This feature can be used to quickly enter a batch of replacement females if the ID codes are consecutive. In addition, you have the option to fill the grid with ID codes by using a filter, and you can import data from external sources.

Reset

Clears the data entered in the current sheet (Batch: One event), or in all grids (Batch: All events)

Edit History

Opens the animal file corresponding to the selected record in the grid for viewing the history or editing.

Preferences

You can customize the grid navigation and data entry:

- **Enter Down:** Checking this will cause the cursor to jump to the cell below when you click the Enter key instead of to the right.
- **Allow Edit:** Uncheck it if you want to avoid editing directly into the grid. Then you must use Add event dialog to fill a row.
- **Show Date:** Show the date column. By unchecking this, you can avoid entering into the date column if all records share the same date. The date will be filled automatically with the **Default Date**, which is usually today's date. See the Default Date box in the bottom of the screen.
- **Drag Data:** Drag the date and ID to the following record.
- **Enter Identification using:** In most cases data is entered by animal Id Code, however it is

possible to enter data using the animal location.

- **Stop Warnings When Processing:** Processing stops if there is a discrepancy in the data or order of events in an animal record to allow you to review and edit the record. However some types of data validation may not be critical. An example would be wean discrepancy errors if foster or death reasons are missing. Check off this box to process the events with an alert you choose to ignore.
- **Process:** You have the option to Process All Events (all event sheets), or Process only Active Sheet Event

Process

Once all the data for a batch of animals has been entered for one or several events, it is necessary to process the data in the grid so it is permanently saved to each animal's record. Click the **Process** button to update the records to the animal file for the current event batch.

If you are entering large amounts of data, it is advisable to process the data periodically so any entry errors or inconsistencies will be easier to find and correct. Inconsistencies found in the data during processing will appear in red and a reason specified.

When the process finishes, the processed records are deleted from the grid. The unprocessed records are displayed. There are 3 types of unprocessed records:

- **Error:** Critical error, for example a event out-of-sequence like a mating after removal. You need to fix it or delete it. They are displayed in red.
- **Discrepancy:** A non critical error. You can fix it, delete it, or uncheck **Stop if Discrepancy** checkbox to ignore them. They are displayed in red.
- **Pending:** Porcitech cannot determine if these records contain errors or not since there are earlier events in the animal record with errors. Until you fix the earlier errors, Porcitech will not process the pending events. They are displayed as blank.

Once you have fixed the problems, you can click **Process** button again. See Options / Data Validation for more control in processing.

Print

Prints the pending processing events. Useful if you want to print the list of errors.

Default Date

If a date is not entered into the Date field of the grid, by default the event date will be assigned the processing date. If all records share the same event date, the processing date may be selected from the **Default Date** box, which will then be applied to all records in the grid.

This date box can also be used like a date calculator by highlighting the date in the box, then typing + or - the number of days. For example, to calculate a due date from a service date, simply type or use the calendar to select the service date in the box, highlight it, then type in +gestation days, and the due date will appear.

Entering data using Batch

To enter data into Batch:

1. In the main menu, click **Farm** and then **Batch Event Entry**.

2. Select the desired event from the top of the grid, or click the **Sheet** button in the left pane, or the **F5** key, to bring up the **Event Selection** box.
3. Select the desired event by typing the first letter(s) or selecting with the mouse if you have selected the Event Selection box.
4. Enter data into the fields. You can enter data directly into the grid, or click **Add** to open the detailed form.

Entry into the grid

This is the fastest way to enter data since it is entered directly into the grid. The **Allow Edit** checkbox is checked by default to allow data to be added into the table. Unchecking this feature will lock the table so that data cannot be changed.

- Arrow keys can be used to move between fields or records.
- Only the most commonly used fields for an event are shown in the grid. If you wish to add more detailed information, you may click the **Edit Detail** button for additional data fields. Also, be sure to check in the **Options** menu **Event fields** that you have selected the desired fields to display in the grid.
- Dates can be entered in the format mmddyy, without the separation bars: January 23, can be entered as 012305.

To automatically fill animal Id Codes into the grid:

1. Click **Fill-In** button, click **Filter** button.
2. Select a filter and enter the filter parameters.
3. Click **OK** to fill the grid with the animal Id Codes.

To fill the grid from Management reports:

- 1-Go to **Reports** and open the desired management report.
- 2-Check on the **Data Transfer To Batch** checkbox.
- 3-Enter the remaining parameters and click **Ok**.
- 4-Print out the report if desired or close it and go to **Batch**.
- 5-Select the appropriate event. For example, if you transferred a list of females from the Females Due to <%Birth%> report, select the Farrowing event. The Id Codes from the report will be filled into the grid.
- 6-Complete the event records data.

To fill any columns in the grid with any values using the Replace feature:

1. To fill an entire column, select the field you want to copy in the grid, enter the value in the cell, click **Replace** button. Select **Copy only selected column of active row** option and click **OK**.
2. To fill selected records, highlight the rows you want to fill by holding down the Ctrl key while clicking each row with the mouse. **The last selection must be the source cell.** Click **Replace** button. Select **Copy only selected column of active row** option and **Only selected records**, and click **OK**.

See also:

Event Entry

How to: Entering same event in a group of animals

How to: Enter 100 new females with a service in her record

Data entry time-saving tips

6.5 Data entry using Animals File

The Animal Files consist of five separate files. There are three for the breeding herd which include **Females**, **Males**, and **Semen**. In addition there are two files, one for **group**, and the other for **Individual Pig Records**.

These files are used if it is necessary to edit an event in an animal's record, or to view the entire record and the animal's history.

The animal files are ordered by the individual animal's Id code, or in the case of a growing group or lot of animals, the growing Id. They contain all the events in the animal's or group record, including additional pages that may show the current status, genealogy, performance history, and any notes or comments.

The animal files are selected by clicking **Animals** on the Main Menu. The **Females** animal file can be accessed directly by simply clicking the icon button below the menu.

To Edit an event in an animal record:

1. Press **Edit History** button from within Fast Entry or Batch, or you can access the Animal file directly.
2. If the ID is not already showing in the events panel, you can enter the **ID** in the **Search** panel and press **Enter**.
3. Double click the event you want to edit.
4. Modify the data boxes.
5. Press **F12** when you are done. If you were working in Fast Entry, press F12 again to save and return to Fast Entry.
6. To **Save** the changes because you want to edit another event or record, click the green arrow icon, or **Ctrl+S**.

You can also use the Animal File to add events.

To Add an event:

1. Enter the **female ID** in the **Search** panel, press **Enter**
2. Press the **A** key to add an event. The Add Event box will pop up with a list of the events.
3. Select the event by either clicking the mouse, or pressing the first letter(s) of the event on the keyboard.
4. Fill in the data boxes for the event.
5. Press **F12** when you are done.
6. To add more events, go to step 2.
7. Go to step 1 to select another female.
8. To save, click the green arrow icon, or **Ctrl-S**.

See also:

Female file

Data entry time-saving tips

6.6 Data entry time-saving tips

The following tips will help you increase your efficiency of data entry when working in Fast Event Entry. You should be able to work in Fast Entry by using the keyboard almost exclusively. We suggest you print this to use for reference until you are familiar with data entry.

Event fields

First go to the **Options** menu and configure the **Event Fields**. Many events will have data fields that do not apply to your farm. You can turn these fields "off" by simply unchecking them so they will no longer show in the events. This eliminates having to enter through empty fields you will never use.

Event names

If there are events you will never use, you have the option of removing them from the event list drop-down box in data entry by unchecking the **Active** box in the event. For example, if you will never use the Register Pig event, you can make it inactive so that when you type "R" in the event field, you will get the Removal event, instead of Register Pig event.

Assigning an alias

If you prefer numeric key entry, you can create a synonym or "alias" for each event, for example 1 = Insemination event. Simply type your key choice in the **Alias** box and click OK to save.

You may also sign an Alias to the various types of Reasons, listed in the Technical section in Options menu. These may include, Removal Reasons, Pre-weaning Death Reasons, Treatment Reasons, etc.

Right-click the reason name to access its options. Select "edit" to add an alias. If you see a reason in the list that you will never use, you may "set as inactive" which removes it from the data entry drop-down box.

A note regarding assigning an alias: the first letter of any event name has priority over the alias. For example, if you assign "I" to the Nurse event alias, and then press F and ENTER, Nurse is not selected. Instead you will get the Insemination event. Try to assign letters that are not already assigned to active events, or use numbers.

Combining events

Certain events can be combined into one. For example, if you routinely enter a breeding group ID with a mating or insemination event, both of these breeding events include an optional group field to enter the group ID. The group ID can be entered with every mating or insemination event per service, but note that it is necessary that the group ID be entered at least once with the first mating in the service.

Another example is the Foster field, which is included with the Farrowing Event. You can simply enter the net fosters for the litter with the farrowing event. The Location and Comment fields are also optional fields included with several events. Verify that the fields you want to combine are checked on in Options|Event fields.

On/Off

Next, it's important to review the default ON/OFF settings in Options menu, and verify if they are correct for your farm. These are switches and are farm-specific. Some will validate the data as you enter it to help prevent errors, and others are big time-savers. Please see the article On/Off for an explanation of each setting.

Change Field Value event

The Change Field Value event was designed to make it easy to change an animal ID from within Fast Entry. It allows you to change the primary ID, the register (alternate) ID, or the electronic ID. If you

enter replacement females using the supplier ID tags and later want to change the primary ID to a new ID, you can automatically move the primary ID to the register ID. Consult this option in Options| ON/OFF "copy primary ID to register ID when modified".

Entering Locations

When entering location events, after the location is entered for the first animal, you can save keystrokes by entering only the lowest level of the location in Location fields. Porcitech reuses the location from the previous entry. For example, if the previous location entered is A-B-2, you can simply enter -3 and the result is A-B-3.

Modify block of female IDs

At some point you may wish to re-use the IDs of removed females. This makes it necessary to modify the IDs of the removed females. In Porcitech it is easy to modify a large number of IDs very quickly. Go to File | Modify Female Block. For example, if you want to modify all ID codes from Y100 to Y200, type these two codes into **Initial code** and **End code**. Check **Only inactive** to change only removed female IDs. Check **Add suffix**. Then type any character in the **Suffix** box and click **OK**.

Fast Keys

You can press the **Alt+S** keys to quickly save the event data without having to press the **Enter** key through every field. For example, if you are entering multiple inseminations and the only field that you want to modify is the date, you can modify the date, and then press **Alt+S** to save the event into the record.

Edit Records

Fast Entry is for adding data only. Animal records cannot be edited from this window. To edit a record, simply click the **Edit History** button in the left panel, or **Alt + E** keys, to access the Female File for editing. When you are done, click the **F12** key to save the changes and return to Fast Entry. Porcitech allows also direct editing from the history panel in Fast Entry. Double-click the event you want to enter to modify it. To delete an event you must access the Female file.

In **Female File**, press **Ctrl + S** to save the changes and return the cursor to the Search ID box. Click **F12** to return to Fast Entry

6.7 How to enter bred females in a new database

When you want to add your bred females into a new database as you build your herd inventory, the following instructions will help you get started. In this topic, we will show how to enter data using the Fast Event Entry method (recommended).

Fast Event Entry method

1. In main menu, click **Farm** and then **Fast Entry**.
2. Enter the new female Id.
3. The first event in a female record must be the **Entry event**. Type the Entry date in the **Date** field. This date must be the same, or earlier, than her service date.
4. Now select **Female Entry** in **Event Type**. Fill the data fields of your choice. You can hide fields you do not use in Options menu/Event fields.
5. After entering through the last field, the data is automatically saved to the record, or you may press **ALT+S keys** at anytime to save the data, or click **Save** button. The cursor will return to the ID field.

6. Now enter the date of the mating or insemination event in the **Date** field.
7. Select **Natural Mating** or **Insemination** in **Event Type**.
8. Fill the data fields of your choice. You can hide fields you do not use in Options menu/Event fields.
9. After entering through the last field, the data is automatically saved to the record, or you may press **ALT+S keys** at anytime to save the data, or click **Save** button.
10. If the female was mated more than once per service, repeat from Step 6 for each mating or insemination.

6.8 How to enter purchased served females

In this sample procedure a female that has been served in an external farm is purchased for your farm.

First you must choose if you want the service that occurred on the external farm to be included in reports as if it occurred on your farm. If so, then see How to enter bred females in a new database

If you want the service, or other events, that did not occur on your farm to be excluded from reports then you must modify the **Arrival Date** to exclude all events that occurred on or before this date.

1. Follow the steps of How to enter bred females in a new database chapter
2. Go to **Options menu/On Off** and remove the check mark from **Entry date cannot be earlier than Arrival date**
3. Go to File and then Female in main menu
4. Select **Current Status** sheet
5. Enter the purchase date in the Arrival date field.

6.9 Event Browser

In the event you suspect data entry errors, the Event Browser helps to discover and fix these erroneous events. The Event Browser shows a list of all data entered in the time period you select. You can quickly correct a block of data that was incorrectly entered into a field of an event.

The Event Browser is accessed by clicking **Farm** on the Main Menu.

Last Event Date and Period

Filter by event date and length of time period.

Filter

Allows you to filter the event list by event and/or event field. For example, to filter by Insemination events:

1. Click Filter button

2. Select Insemination and click Ok

To filter by inseminations with male = 102:

1. Click Filter button
2. Select Insemination and click Ok
3. Enter 102 in the male field and click Ok

Modify Block

Click Modify Block to modify a block of records of any field in the event. All records in the grid that match the filter pattern will be modified.

For example, to modify the male field in the insemination event to 501:

1. Click Modify Block button
2. Select Insemination and click Ok
3. Enter 501 in the male box and click Ok

Show

Refresh the event panel according to the filter.

Next and Previous

Click Next and Previous button to move the period filter.

Refresh

Refreshes the event summary in the right panel.

Automatic Refresh

When it is checked, the summary is automatically recalculated each time that data is changed. It can be slow in some scenarios. If it is unchecked, you must click Refresh button to update the summary.

Edit Event

Click Edit Event or double click to edit the selected event.

Delete Event

Click Delete Event to remove the selected event.

Consult

Click Consult to go to the corresponding female record.

See also:

Using Event Browser to merge codifications

Using Event Browser to change header values

6.10 Automatic handwriting recognition

ICR (handwriting recognition) technology can be used to scan data collection forms and enter the data automatically into Porcitech.

The idea is very basic, you can design and print your female card forms or event sheets and fill them in by hand. These forms are then collected and fed into an automatic scanner. Using the ICR program, the data is automatically extracted and entered into the Porcitech database. Each form takes only about 1 second to be processed.

The ICR application used by Porcitech by default is ABBYY FormReader. It is an independent software program that is installed in a computer. It can scan forms very fast with reasonable precision and is compatible with more than 250 scanners. This software is not only OMR (recognition of check-marks), you can also hand-write dates, codes, etc.

**Is ICR included in Porcitech?**

Porcitech does not include the ICR application, it must be acquired separately.

How much time will it take to set up the ICR?

Usually half a day for the average person.

How much time will it take to design a form and configure the ICR for this form?

You can design your own form, usually in 2-3 hours. However, Agritec can provide you with standard forms.

What is the cost of the ICR?

The ICR that Agritec uses costs from \$3000 USD. However Porcitech can import data from most other commercial ICR applications, so you can choose the package that best fits your needs. Contact Agritec for more details.

Is the ICR precise?

It depends on several factors (scanner, form design, ...), please contact your ICR distributor for more details.

How many forms I can scan per hour?

This is variable and depends on the hardware of the machine that you use, but on average it may be about one second per form.

6.11 Changing the ID code

Sometimes it is necessary to change the animal ID code or group ID.

1. In the main menu, click **Animals** and then click the appropriate file (Females, Males, ...)
2. Select the ID code by entering it in the the **Search** box.
3. Click **Current Status** sheet.
4. Type the new **ID Code** in the large ID code box.
5. To save, click green check icon, or **Ctrl+S**.

Another way to change the record ID code is by using the Change Field Value event .

Notes:

- To change the ID code from **Event Entry**, click the **Edit History** button in the left pane to bring up the animal record and follow the above instructions.
- If you modify a male code, the insemination events related to this male are automatically updated.
- If you modify a Group/Lot Id, the financial related records are not automatically updated. You must manually edit them using the Financial window.

6.12 Using Batch to enter a treatment to a group of entered females

This example shows how to enter a vaccination into a group of entered females. The same procedure can be applied for any event into any group.

1. Go to **Batch Event Entry**.
2. Select the desired event, in this case **Treatments**.
3. Click **Fill-In** button, click **Filter** button.
4. Select a filter if desired and fill the filter parameters, in this case **Status=Entered**.
5. Click **OK** to fill the grid with the animal Id codes.
6. Enter the **Treatment Id** and the **Route** in the first row.
7. Click **Replace** button.
8. Select **Copy Active Row** and click **Ok**.

6.13 Using Batch to enter replacement females into the herd

This example shows how to enter 100 new replacement females into the herd.

Creating the first Entry event

1. In main menu, click **Farm** and then **Batch Event Entry**.
2. Click **Sheet** and select **Entry**.
4. Enter the first **Female ID**, for example **1000**.
5. Fill the common fields, for example entry date, genetics, and origin.

Duplicating the first row to add more females

1. With the cursor in the first row, click **Fill-In** button, and then **Duplicate**.
2. If the Id Codes are consecutive, enter **99** in **Number of Rows** and click **Ok**. The columns will fill to 99 more rows with the data you entered into the first row. The Id Code field will be increased one number per row. If you use letters in the ID code, such as Y1000, the letter will be included.
3. You can edit any field in the grid with data specific to any female, such as birthdate or location.
4. Click **Process** to save the records.

6.14 Using Batch to inseminate a group of females.

This example shows how to inseminate a group of females.

1. In main menu, click **Farm** and then **Batch Event Entry**
2. Click **Sheet** button and select **Insemination**.
3. Enter female **ID codes** in Code field, or click **Fill-In** button and then **Filter**.
4. If you use the Filter option, in **Predefined Filters**, select for example **Status=Entered, or Status=Weaned** and use the date filter if desired.
5. Click **Ok**.
6. Enter the **Semen Id** and the **Group** in the first row.
7. Click **Replace** button
8. Select **Copy Active Row** and click **Ok**. All fields, except the ID code, will be copied to all records in the grid.
9. If you want to copy only selected columns, click **Copy only selected column of the active row**.
10. Click **Process** to process the save the records.

6.15 Using Event Browser to merge codifications

You may want to merge two similar codifications into one. For example, say you created OLD PARITY and OLD AGE as two different Removal Reasons in Options, and now you want to merge the OLD PARITY reason into the OLD AGE reason. You want to deprecate the OLD PARITY reason so it is no longer used.

Following the above example, the steps would be:

1. In main menu, click **Farm** and then **Event Browser**

2. Click **Filter** button
3. Select **Removal** event and click **Ok**
4. Select **Slaughtered** as **Type** and **OLD PARITY** as **Removal Reason**, click **Ok**
5. Select **All** in **Period** box. Now the filtered removal reasons will appear. This may take some time depending on the size of the database and speed of your computer.
6. Click **Modify Block** button
7. Select **Removal** event and click **Ok**
8. Select **Slaughtered** as **Type** and **OLD AGE** as **Removal Reason**, and click **Ok**.

See also:

Event Browser

6.16 Using Event Browser to change header values

The Event browser can be used to change header values in the animal Current Status sheet, such as birthdate, genetics, etc. After clicking Modify Block button, you can select the event to apply changes. The Header event is a special event that is applied to any animal that appears in the grid. For example, you may want to change the genetics and birthdate of females that were entered in January 2010:

1. In main menu, click **Farm** and then **Event Browser**
2. Click **Filter** button
3. Select **Entry to Breeding Herd** event and click **Ok**
4. Click **Ok** in the event fields form
5. Enter 31 JAN 10 in the Last Date box
6. Select **One Month** in **Period** box. Now the filtered females will appear
7. Click **Modify Block** button
8. Select **Header** event and click **Ok**
9. Fill the **birth date** box and select **genetics** with the new values
10. Click **Ok**

See also:

Event Browser

6.17 Select Individual for Breeding Herd

This feature automates the transfer of animals from the individual file to breeding female or male file, or to sales. The animals must have birth dates recorded to use this feature.

1. Enter a minimum and maximum age for the individuals

2. Click **Search** button to preview the individual selection
3. Double click the individual to transfer
4. Enter **Sale** or **Entry to Breeding Herd** in the Destination
5. Optionally you can enter a new location or a comment
6. Click **Ok** and repeat for each individual that you want to transfer
7. Click **Save And Close** to apply the changes

6.18 Change Female ID Codes

This option, under the **Farm** menu, is used to change the IDs of a block or group of breeding females using a mask. It is especially useful for modifying the IDs of removed females so that the IDs can be used again for new females.

Initial Code and End Code

Optional filter to select a group of females by ID code. For example, if you enter W100 for Initial code and W200 for End code, all IDs from W100 to W200 will be modified.

Status Filter

Filter by All, Active, or Inactive (removed) status.

Modify Code

- **Incremental Code:** Rename the females starting from the Initial Number and increasing in 1 unit.
- **Format to Mask:** Uses a part of the current female code and formats it according to the mask.
- **Add Suffix:** Adds a suffix to the the existing female code.

Depending on the **Modify Code** selection, additional options will appear:

Mask

Mask to format the new codes. It specifies the number of leading zeros. See **Initial Number**.

Initial Number

Initial number for female codes. See **Mask**. For example, selecting 0000 in Mask and entering 98 as Initial Number, the new IDs will be:
0098, 0099, 0100, 0101, ...

Initial Position of Character and End Position of Character

Defines the part of the female code to use for formatting. It extracts a part of the preview ID and masks it. It is only valid if you have selected **Format to Mask**.

For example, your preview IDs are AB506, AY706, CD103, and you want to rename them to 0506, 0706 and 0103

Mask: 0000

Initial Position of Character: 3

End Position of Character: 5

Suffix

Suffix to be added in the female code. It is only valid if you have selected **Add Suffix**.

Preview

Allows you to preview the block of IDs that will be modified.

Process

Click the Process button to modify the IDs in the database.

6.19 Users

The Users module allows you to define who has access to Porcitech and which functions they can access. It can be useful in environments where more than one person can access the Porcitech database. This feature is integrated with the Windows authentication system. All users declared in Porcitech must first be added to the Windows user accounts.

This feature is disabled by default. To enable it, click **File** menu and then **Users**. Click **Active User Control** button to activate the user management function. You will see that the button now has a frame which means that the Users function is now working.

Important: You must login to Windows with administrator privileges to activate/deactivate this function and to manage users of Porcitech.

If this feature is active, any Windows user not declared in Porcitech will be treated with the lowest privileges, which includes not being able to enter data, among other issues. When you activate this feature, you need to add all Windows users that can execute Porcitech in order to provide the required privileges to each one.

To add users in the system, click **Add** button:

User

Name of the user. The user name must be the same as that used in Windows.

Open Reports

Enable user to open reports.

Edit Reports

Enable user to edit reports using any report designer.

Data Entry

Enable user to enter data.

Edit Options

Enable user to modify the settings of Porcitech, under **Options** menu.

Delete Animal Records

Enable user to permanently delete animal records in the database.

See also:

Track activity

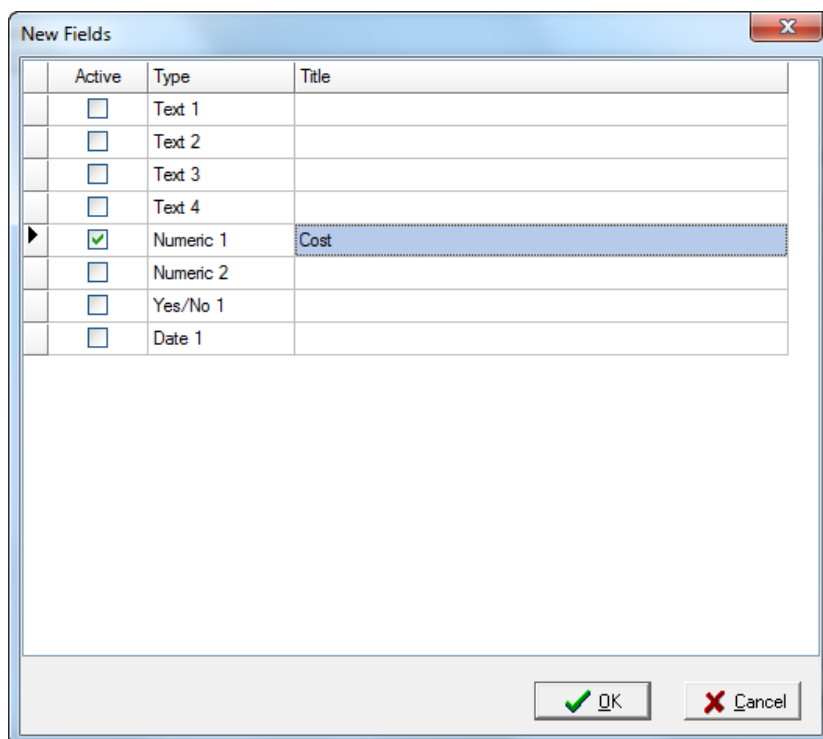
6.20 How to use User Fields

User Fields is a powerful feature, used to manage additional data that the application does not include fields for. This post shows how to configure the User Fields and how to extract the information in a report. For example, a user wants to record a monetary cost in each insemination event. Also, it is required the total cost per month.

Go to **Options** and then double click **Event Fields**. Double click **Females** and then select **Insemination**. This form allows you to configure all fields for the insemination event.

Title	Form	Batch	Handheld
▶ Semen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Technician	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hour	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Click **New Fields** button to add new user fields. Since the cost is a numeric value, check the **Numeric 1** field and add a description, for example "Cost".

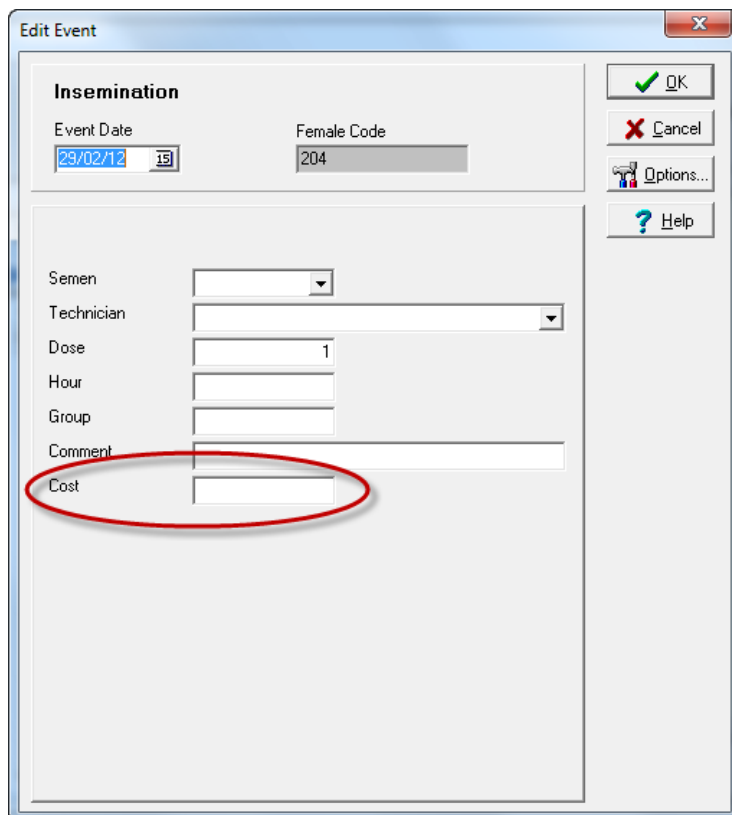


The 'New Fields' dialog box contains a table with the following data:

	Active	Type	Title
<input type="checkbox"/>		Text 1	
<input type="checkbox"/>		Text 2	
<input type="checkbox"/>		Text 3	
<input type="checkbox"/>		Text 4	
<input checked="" type="checkbox"/>		Numeric 1	Cost
<input type="checkbox"/>		Numeric 2	
<input type="checkbox"/>		Yes/No 1	
<input type="checkbox"/>		Date 1	

At the bottom of the dialog are two buttons: **OK** (with a green checkmark icon) and **Cancel** (with a red X icon).

Click **OK** button to save the changes. Now when you enter an insemination event, a new field called Cost appears:



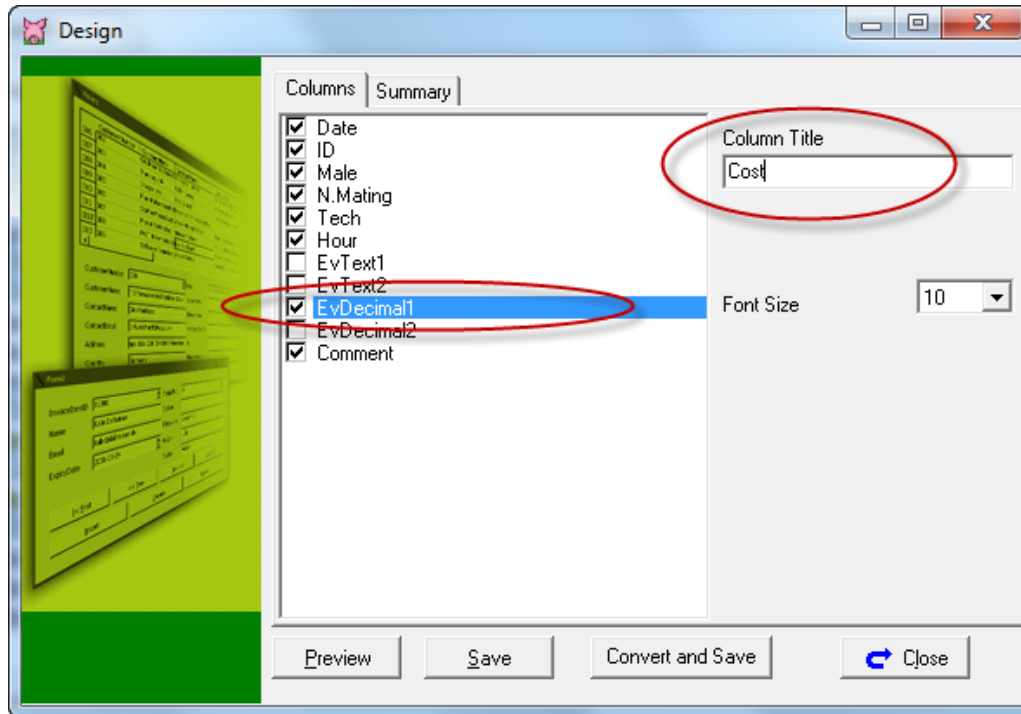
The 'Edit Event' dialog box is titled 'Insemination'. It contains the following fields and controls:

- Event Date:** A date picker showing 29/02/12.
- Female Code:** A text field containing 204.
- Semen:** A dropdown menu.
- Technician:** A dropdown menu.
- Dose:** A text field containing 1.
- Hour:** A text field.
- Group:** A text field.
- Comment:** A text area.
- Cost:** A text field, which is circled in red.

On the right side of the dialog are four buttons: **OK** (green checkmark), **Cancel** (red X), **Options...** (wrench icon), and **Help** (question mark icon).

Enter the insemination event, adding the cost value as with any other field.

To get a list of matings with the cost value, go to **Reports** menu, select **Services** category, select **Matings** report and click **Design** button. Place a check mark in **EvDecimal1** field and enter a title for the report column.



Click **Preview** button to see the results. A new column called Cost will appear, displaying the recorded cost for each mating. Finally click **Save** button to save the new report in the User folder for future uses.

To get the monthly cost, it is necessary to create a new report. Go to **Reports** and click **New**, click **Breakdown** type and then click **OK** button. Enter the following values:

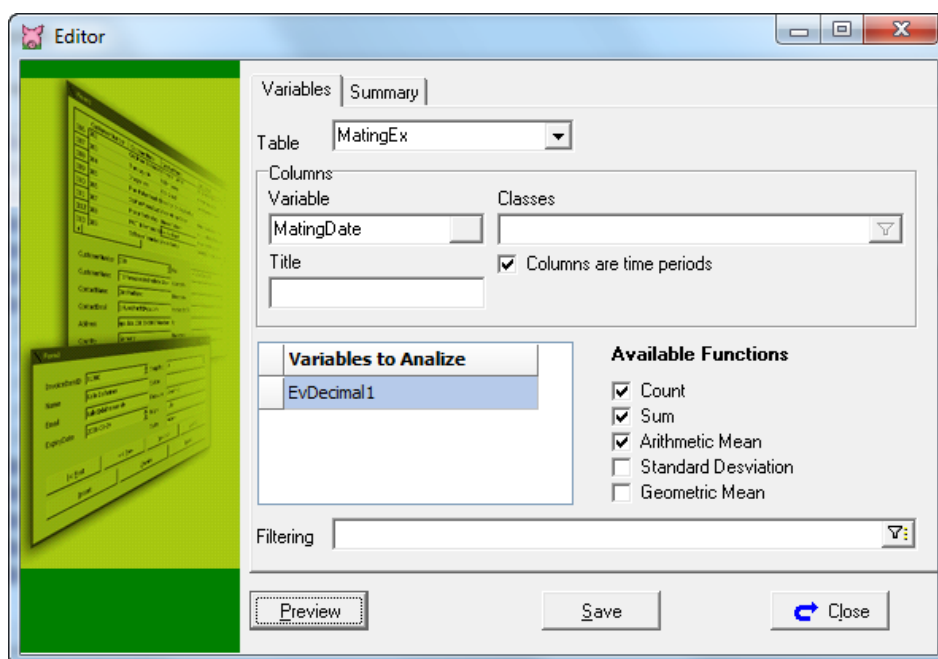
Table: MatingEx

Variable: MatingDate

Columns are time periods: On

Variables to Analyze: EvDecimal1

Available Functions: Count, Sum, Arithmetic Mean.



See also:

Event fields

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



VII

7 Female file

7.1 Females file

The **Females** file contains all the events entered into the records of the breeding females in your herd.

Note the following National Pork Board definitions:

- **Unmated breeding female:** A female entered into the breeding herd but not yet mated, commonly called a gilt.
- **Mated breeding female:** Any breeding female which has been mated at least once and has not yet been removed from the breeding herd.

The **Females** file is used to add multiple events to the record of a female, edit events, and to view the status, history, and performance of the females on the farm.

For entering replacement unmated breeding females into the herd it is usually more efficient to enter them using **Event Entry** data entry. Please see the article [Entry of breeding females](#).

First steps:

- Open the Females file by clicking the icon on the main menu.
- You will see 8 sheets, or folders, for each animal. These are labeled Events, Current Status, Results, Services, Parity, Notes, Geneology, and Photo. Each are explained in detail in subsequent articles, see below.
- Females may be entered into the file gradually or all at the same time.
- Each female may be given an alphanumerical code of up to ten letters or numbers.
- When setting up Porcitech for the first time, existing females of the farm can be entered and coded in this section or in **Event Entry**, depending on the amount of history and other information you wish to enter for each animal.

Note: If you do not wish to enter the histories of older animals, it is important to at least enter their current parity in the **Previous Farrowings** field of the Current Status sheet. If you are using **Event Entry** to enter females, enter the current parity into the field **Initial Parity**

See also:

Data entry using the Animal File

How to: Add a pregnant female

How to: Modify an erroneous pregnancy check

7.2 Breeding female classification

All females intended or used for breeding purposes ("breeding females") are defined using the following terminology:

- Prospective breeding female
- Unmated breeding female
- Mated breeding female
- Removed breeding female

The change in status of a breeding female is “event driven.” That is, the transition of a breeding female from “prospective” to “unmated” to “mated” to “removed” is determined by the occurrence of events in its life history record:

Event	Classification
Arrival event	Prospective breeding female
Entry event	Unmated breeding female
Mating event	Mated breeding female
Removal event	Removed breeding female

- The **Arrival Event** is defined as the day a **Prospective breeding female** or male is transferred or delivered to the farm, or if home-raised, selected for future breeding use. Generally these animals are of a very young age and are not reproductively mature. Prospective breeding females do not contribute non-productive days to the breeding herd because technically they are not yet counted in breeding herd inventory.
- The Arrival Event does not exist in Porcitec as an event. It can be entered into a field in the status sheet of the female file if desired.
- In the case of purchased females placed directly into the breeding herd, arrival and entry dates would be the same. Such animals would have arrival-to-entry intervals of zero days.
- The **Entry Event** is defined as the day a prospective breeding female or boar enters the breeding herd. On this date a female becomes an **Unmated breeding female**, and is counted in **Unmated breeding inventory**.
- An Unmated breeding female becomes a **Mated breeding female** on the date of her first mating event. She will be counted in **Mated breeding inventory** until she is removed from the breeding herd with a **Removal event**.
- By definition, an **unmated female** has no mating event in her record. A **mated female** is defined as having at least one mating event in her lifetime record, regardless if she is currently assumed to be pregnant or not.

7.3 Searching for a breeding female

From the **Females** file, enter the **female Id code** in the **Search** panel, then press **Enter**. Use the **View** box to filter the animals by Active, All, or User defined. Press **F3** to access it directly

Active

Only active animals currently in the herd.

All

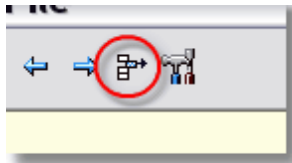
The filter includes all animals, active and inactive (have been removed).

User filter

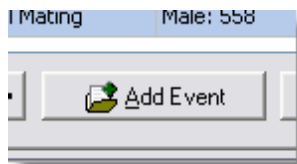
Use this option to fine-tune your search. You can search by fields such as location or Register Id. See `Filter_options_form`

7.4 Deleting a breeding female

- Deleting an animal from the database should only be done if the animal was entered in error and never actually existed. Click **Delete** from the Female File. This process removes the female record irrevocably when it has been entered by error.



- To inactivate an animal for reasons of death, sale, transfer, or culling, you must use the **Removal** event. Click **Event Sheet** on the Female file, click **Add Event**, select **Removal** and fill in the fields. This procedure does not delete the animal's record from the data file.



7.5 Events sheet

This sheet lists all the events in the female's record ordered chronologically by date of event. Any events can be added or edited in this folder.

When adding a female for the first time, it is necessary to enter the events which define the current status of the animal. For example:

- New or unbred female: Enter an entry event.
- Served female: Enter a mating event
- Pregnant female: Enter a mating event and a positive pregnancy diagnosis event

The entry of events can be done either on this sheet or in [Events Entry](#).

7.6 Female events

7.6.1 Location

This event is used to enter the location of an animal on the farm. The last Location event entered for a breeding female becomes the current location, and will print on the management lists making it easy to find an animal due for treatments. Up to 3 location levels may be defined in Options for a location event.

For females:

- A Location event entered within 14 days before or after a farrowing event is defined as the Farrowing Location.
- A Location event entered within 100 days after an Entry or Weaning event becomes the Gestation Location.

Event Fields:

Event Date

Date of the location event.

Location

New location of the animal. If the location starts by -, then Porcitech merges the new location with the current location. For example, a female is in ABC-45, entering -10 as new location, Porcitech will use ABC-10 as new location.

Comment

Any user comment

See also:

Application format

7.6.2 Treatment

This event is used to record any treatments given to animals. These will include any medications or vaccinations used to treat or prevent any disease or injury.

Event Date

The date of the event.

Female Id

Code or Id of the animal.

Treatment

The medication or vaccine used. Treatments must be previously coded in **Options**.

Dose

The dosage used in the treatment.

Units

Units type.

Route

Route of administration of the treatment.

Treatment Days

The number of days duration of the treatment.

Withdrawal

The number of days the treatment must be withdrawn and the animals held before slaughter.

Reason

The reason the treatment is administered. Reasons must be previously coded in Options.

Technician

The technician administering the treatment.

Receipt

Receipt or Document ID of vet. It updates the last receipt value in **Options / Treatments**.

New Location

Record a new location if the animal is moved for, during, or after treatment.

Comment

Any user comment.

See also:

Treatments

7.6.3 Physical condition

With this event you can record the date and some physical measurements, such as weight, girth, height and score at various points or events in the animal's life.

Type

Optional field to define the type or class of the measurement event. It can be used in advanced reports to compare up to three Physical Condition events side by side for each animal using the IID_LstPCondition variables. You usually can ignore this field.

7.6.4 Comment

You may enter a **Comment** into the record of an animal. Only the Comment event with the **latest date** will be displayed in the Status sheet of the female file and also in the parity column of the Female History Card.

7.6.5 Change field value

This event changes the value of the status of the animal. It is most commonly used to easily change the animal ID when a temporary ID is replaced by a permanent ID, such as when applying a farm tag to a replacement female already identified with a supplier tag.

If you want the original ID to become the register or alternate ID when new tag is applied, you can configure in the Options menu in On/Off to automatically move the primary ID to the register ID field when the primary ID is modified.

Type

Select the field name to change. You have a choice of Animal ID, Electronic ID, Register ID, and several user fields.

New Value

New value that will replace the current value.

7.6.6 Feed in

This tracks the feed consumed by an animal individually. This area of data entry is essentially designed to view data received from electronic feed systems, since manually entering feed weights and associated information per individual on even a moderate-size herd is often considered to be excessively time-consuming.

7.6.7 User event

There are three User events that allow the entry of any custom event into the record of an animal.

For example, you might want to record blood test results, see Serology results for more information. Or you might want to create a User event called "Post-birthing". Then all comments pertaining to birthing can be entered using this user event. It is used for filtering when creating reports. Also, it can be used for trial purposes, by defining a subset of females and comparing variables.

7.6.8 Offspring weaning

Weans the individual from the dam. It indicates when the individual is separated from the dam. It automatically adds the weaning event in the dam history when all individuals of the litter have been weaned. See **Automatically dry off the dam with Individual wean** at Options.

See also:

On/off

7.6.9 Entry to breeding herd

This event moves an animal from the **pig** file to the appropriate **Females** or **Males** file when they are ready to enter the breeding herd, and adds the Enter event to the appropriate Female or Male file. Fields such as genetics, sire, dam, origin, etc are also transferred.

Code

Current Id code.

New Code

New Id code to be assigned in the male or female files (optional).

New Location

Location to be assigned in the male or female files (optional).

Weight

Present weight of animal (optional).

Transferring a batch of females to breeding herd

1. Click **Event Entry** button at main menu.
2. Click **Batch** (one event).
3. Click icon for Individual records.
4. Select **Transfer to breeding herd** event.
5. Click **Fill-in** button.
6. Select **Fill rows with result of a filtering**.
6. Now select your filter, usually Arrival Date, and enter the date range.
7. The grid will fill automatically. Click **Process** button to transfer the animal records to the breeding herd.

7.6.10 Removal

The elimination of an animal from the herd is recorded with a Removal event. The Removal Type (death, slaughter, or transfer) must be entered along with the reason for her removal. Once the animal is removed, she becomes inactive, although the data remains in the database. The animal can be restored into the herd by simply deleting the Removal event.

Event fields: Event Date| Removal Type| Removal Cause| Weight| Comment

7.6.11 Group

Generally the Group event is used to code breeding cohorts of females. It should be entered with the same date as the **first mating** of the service event, and it will print on reports in the Group column of your management lists. The Group field is alphanumeric and user defined. You may enter anything you wish.

As an easy alternative, the Mating and Insemination Events also include a Group field to record the Group event. The group assigned to the service must be entered with the first mating or insemination. The current group assigned to the female on reports is always the latest entered.

7.6.12 Label

The **Label** event is used to tag females for trials or any other purpose. It is parity specific, which means that the label is assigned to the current parity.

ParityLabels variable of the **Parity** table contains all label events in a parity separated by ;. The **ParityLabels** variable can contain up to 40 characters. It is important to be aware that when this limit is reached, additional label events are ignored.

It is recommended to use short labels (3 or 4 characters) for better efficiency at recovering the data.

7.6.13 Litter ID

The **Litter ID** event is used to record litters that are identified at birth by ear notch, tags, tattoo, etc. The farrowing event also contains a field for Litter ID. Either way can be used to identify a litter.

7.6.14 Nurse on

The Nurse On event is used to record the adoption of a litter by a female after she has weaned her birth litter. The Nurse On event must follow a Weaning or Abortion event. A female may have multiple Nurse On and Weaning events per parity.

Event Fields:

Event Date

Date of Nurse On event.

Number of Preweaned

Number of preweaned Pigs nursed on.

Preweaned Age

Age of Pigs nursed on, if known.

Comment

Any user comment.

7.6.15 Identify at wean

If you want to identify each individual offspring of an entire litter at weaning, use this event in place of the Weaning event.

This event is only available in Fast_Event_Entry. It weans the litter and individually identifies each weaned offspring. It adds a Weaning event to the female record and at the same time adds Entry events to the weaned offspring that are automatically transferred to the Individual file with their ID code, birth date, new location, weight, and other data such as sire and dam.

Weaned Animals

Number of weaned animals.

Initial Code

If the ID codes given to the offspring are consecutive, enter the first code to be assigned to the weaned offspring.

Initial Location

If the offspring will each be assigned an individual and consecutive new location, enter the first location here.

Click the **Assign** button. Porcitech fills the bottom grid with the number of defined weaned animals, using **Initial Code** and **Initial Location** for the first row, and increasing the values in each row. The **Sex** and **Weight** column can be assigned manually.

Click **Save** button. The weaned offspring are transferred to the Individual file, and a Weaning event is added to the female.

7.6.16 Weaning

A Weaning event is added to the record of a lactating female when all her Pigs have been removed for placement into the nursery. Her status will now change from Lactating to Weaned, unless another preweaned litter is given to her using the Nurse On event. In this case, her status remains Lactating until she weans the nurse litter. Therefore a female may have more than one Weaning event per lactation. A litter of weaned animals may optionally be added to the group File by identifying a nursery Group ID, a destination location, and entering the litter weight at weaning.

Note: If Group IDs are assigned to a group that already exists, it adds them and calculates the average age. Once weaned, the animals will be put in the growing file along with all their corresponding data (birthdate, genetics, group, etc.)

Event fields:

Event Date

Date of weaning.

Num. weaned

Number of animals weaned.

Total weight

Total weight for all weaned. If you know the average weight, then you can enter * before the weight and Porcitech will automatically calculate the total weight, multiplying the average weight for the number weaned.

Group ID

Id for the growing file.

Location

New location for the female.

7.6.17 Partial weaning

The Partial Weaning event is used to remove Pigs early from a lactating female before the date of her Wean event, also known as "split wean".

It is important to note, that for most calculations that use "number of Pigs weaned", the number of Pigs weaned using the Partial Wean event are not counted until the date of the Wean event. The exception is the variable for Pigs Weaned in Period (NWeaned) in the Performance Analysis report, which counts the actual number of Pigs weaned from Partial Wean or Wean events on the date of these events.

7.6.18 Nurse off

The Nurse Off event may be used when a lactating female must be removed from the farrowing location before her Pigs are old enough to be weaned. In this case her Pigs are divided among other lactating females using the Foster event, or her entire litter may be given to a weaned female with a Nurse On event. The donating female is given a weaned status with a Nurse Off event, and her weaning average will reflect that she weaned 0 Pigs.

Event Fields:

Event Date

Date of event

Number

Number of Pigs removed. This number must equal all remaining Pigs in her litter.

Comment

Any user comment

7.6.19 Deaths of preweaned

This event is used to record the deaths of preweaned Pigs. Its use is optional since pre-weaning mortality is calculated using the numbers for farrowed and weaned. It is useful for diagnostic purposes to analyze the reasons and ages of preweaned deaths, and for counting inventory. If you are using <Pigs file, a removal event in the Pigs file automatically adds a Death of Preweaned event to the dam history.

Event Fields: Event Date, Number of Preweaning Deaths, Cause, Comment

7.6.20 Foster

This event is used to record the movement of Pigs from one lactating female to another.

Event Fields:

Event Date

Date of the Foster event. More than one foster event may be recorded per female per lactation.

Net Fostered

The number of Pigs transferred. Fosters may be entered as a positive or negative number.

Fostered Off Female

The use of this field is optional. A female code may be entered in this field for the donating female. In this case only positive fosters can be entered in the Net Fostered field of the current record, and fosters will be automatically subtracted from the record of the donating female. It is important to be consistent when using this feature.

Comment

Any user comment may be entered.

Note: If a female fosters off her entire litter, she will wean 0 Pigs and a Wean event must be added to her record, or instead you may use the **Nurse Off** event.

7.6.21 Register Pigs

If you want to identify individual offspring before weaning, or only part of a litter, you can use this event to identify them. First go to **Options menu, On/Off**, and add a check mark in "**Add Pigs to Individual file with Register Pigs event**". Then in the Register event, enter the ID, sex, register (alternate) id, genetics, and weight for each offspring that you wish to identify. These animals will then be created automatically in the Individual Pig Records file. Genetics are assigned automatically if the dam and the sire have the same genetics.

7.6.22 Farrowing

This event records the farrowing data of a breeding female. The parity of a breeding female increases by 1 on the date she farrows.

Event fields:

Date

Date of event.

Live

Number of animals born alive.

Dead

Number of stillborn animals.

Mummified

Number of mummies.

Litter Weight

Total birth weight of the litter, if weighed within 24 hours after birth.

Foster

Net fostered on the date of farrowing. Net fosters and a farrowing location can be entered directly with

the farrowing event to facilitate data entry.

Location

The farrowing location of the female. If it is not recorded, the location is not updated.

Problems

A code for farrowing problems.

Comment

Comment.

7.6.23 Pre-Farrowing

This event is used just before the farrowing event and after the service event. In some farms it is used to enter the female into the parity facilities, other farms use it for some treatments before farrowing. Its use is optional and it does not affect performance reports.

7.6.24 Abortion

The occurrence of an abortion is entered with this event. The status of the female will change to Aborted and her abortion date is the beginning day of her abortion status.

An aborted female may be used as a nurse sow with a Nurse On event following the Abortion event. In this case her status will change to Lactating, however her parity number does not change because she did not birth. More than one abortion event may be entered per female per parity.

Event fields: Event Date|Comment

7.6.25 Pregnancy diagnosis

When a pregnancy diagnosis is performed on a mated female, the result may be entered using this event. There are 4 possible outcomes:

- **Positive test** - updates the status of the female from Served to Diagnosed Pregnant.
- **Negative test** - changes the status of the female from Served to Diagnosed Not Pregnant.
- **Not conclusive** - this is used if the result of the pregnancy test is questionable. It will not change the status of the female, but is a reminder she should be retested at a later date.
- **Observed not pregnant** - this result is used for occurrences later in gestation when a female presumed to be pregnant is observed to be no longer pregnant. It will change the status of the female from Served to Diagnosed Not Pregnant.

Note:

When defining the current status and pregnancy state of the female, only the last entered pregnancy diagnosis event is considered. Previous entries are ignored. For example, a positive diagnosis entered after a negative one modifies the female's status to Diagnosed Pregnant.

7.6.26 Heat not served

To monitor the estrous cycle of a female, a **Heat Not Served** event may be entered for a female who is observed to be in heat but is not mated. The program will then estimate the date of her next heat, based on the number of days of a regular estrous cycle, as specified in **Options** Time intervals for the Heat Not Served event.

Event fields: Event Date, Heat Control, Technician, Comment

7.6.27 Embryo transfer

Permits the entry of an embryo transfer procedure into a female's record. The donating male and female, and the technician performing the procedure may also be recorded with this event. The status of the female will be updated to Served.

Event fields: Event Date|Boar|Donating Female|Technician|Comment

7.6.28 Natural mating

Natural matings to a female by a live male are entered using this event. A mating event should be added for every consecutive date a female is mated during a service. The service date is determined by the first mating (or insemination) in the service.

Date

Date of mating

Code

Code of mated female

Male

Code of male.

Technician

Code of technician.

(Technicians should be previously coded in the Options menu.)

Breeding Group

Code of breeding group. See [Group](#).

7.6.29 Artificial insemination

Matings by artificial insemination are entered with the **Insemination** event. An insemination event should be added for every consecutive date a female is mated during a service. The service date is determined by the first insemination (or mating) in the service.

Note: Batches of semen may be previously coded and inventoried in the **Semen** file in the Animals menu. If this option is used, doses of semen will be automatically subtracted from initial inventory when an Insemination event is entered into a female's record.

Event Fields:

Date

Date of insemination of the female

Code

Code of female

Semen

Code of the semen batch, or male ID

Doses

Number of doses used. Portions can be specified, i.e. half doses=0.5

Technician

Code of technician

(Technicians should be previously coded in the Options menu.)

Breeding Group

Code of breeding group. See [Group](#).

7.6.30 Entry of breeding females

This event defines the entry of new breeding females into the farm. Some fields can be hidden or shown according to farm preferences, such as breed, birthdate, origin, sire, dam, etc. To customize the screen for the Entry event, in the main menu, click **Options | Event Fields | Entry**.

The Entry Event is defined as the day a breeding female or male enters the breeding herd.

ID Code

Every animal must have an ID code for correct identification. All events in the program, such as mating, birthing, etc., are entered by ID Code, NOT by location.

The field for ID Code allows up to 10 alphanumeric characters.

The ID Code field is alphanumeric, and thus will sort as if a dictionary, such as 1, 10, 100, 11, 12, 13, 14, 15, 16, 17, 18, 19, 2, 20, 200, 21, etc.

The code allows the entering of characters, for example Y101, X0001, SBOIT, etc.

Recommendations for choosing codes:

- Use a numerical format of 4 or 5 digits.
- You can use letters in a code but it will slow data entry.
- Do NOT use spaces in a code.
- Consider the highest number you will eventually use for IDs in your herd, and justify the left margin with zeros (0001, 0020, 0123,...) if you desire codes in numerical order.

See Using Batch to enter replacement females into the herd

7.7 Current Status sheet

Every animal has a **Current Status Sheet** attached to its record. This is a place to record information for an individual that will not change throughout the animal's life, such as an alternative ID, birthdate, origin, genetics, etc.

Location

The **Location** field shows the current location of the animal and may contain any combination of letters and numbers up to 10. The number of location levels and the number of characters per field must be previously defined in **Options|Location Format**.

The Location field in the Status Sheet is associated with the **Location Event**. Entering the location by using the Location Event, or in the Location field associated with another event, will automatically update the current location in this field in the Current Status Sheet. Conversely, manually entering a location into this sheet will create a Location Event in the animal record.

If several animals may share the same location, verify that the box is unchecked in **Options| On/Off | Verify empty location in location event**.

Register ID

An alternative identification such as a second ear tag or a tattoo.

Origin

Check if the animal was **Raised** on your own farm, or **Purchased** from an external source.

Birth date

The animal's date of birth.

Origin

Origin of animal defined in Suppliers

Genetics

The genetics or breed of the animal.

Long Name

A field to record a pedigree name if desired.

Litter ID

ID of the animal litter.

EID

Electronic identification number. It is entered using the Change_field_value event. An RFID tag is attached to or implanted into an animal for the purpose of electronic identification using radio waves. Usually this system works with a handheld computer using the QuickData software. Each RFID tag has an ID number usually provided from the manufacturer. When the tag is placed in the animal, this event relates this electronic ID to the animal.

Comment

Last comment entered in any event. It can contain any brief comment, a symbol, a number, etc.

To Be Removed

This can be used to mark females intended to be sent to slaughter but have not yet left the farm. If checked, she will be excluded from showing on service management lists.

Physiological Status

Indicates the physiological status and lapsed days from the event date:

- E Entry
- H Heat Not Served
- S Served
- N Pregnancy Diagnosis = Negative or Observed not pregnant
- P Pregnancy Diagnosis = Positive
- A Abortion
- L Lactating
- W Weaning
- R Removal

Previous births

Specifies the value to be added to the number of births by the female for the calculation of the real number of births, or parity. If the reproductive record is incomplete, the program needs to know the number of omitted births, previous to the record to calculate the parity. Zero is the default and indicates that the number of births is equal to the actual parity number.

Morphologic Score

Numerically specifies the point score given to a selected animal.

7.8 User sheet

Each animal can have up to 28 User fields that are associated with the Current Status sheet in the animal file. (These fields are not to be confused with the User Event.) The User sheet displays the user fields and allows you to edit them. Some user fields can be entered using the Change_field_value event.

User Fields are useful for managing additional custom data that Porcitech does not include by default, for example additional IDs, morphologic scores, color, size, etc.

It is important to note that User field data added in the User sheet applies to the animal for the lifetime of the animal and to any and all parities. User sheet data fields should not be used as a filter to gather any parity-specific information.

Click **New Fields** button to add your custom fields.

	Active	Type	Title
<input checked="" type="checkbox"/>	Text 1	My first user field	
<input checked="" type="checkbox"/>	Text 2	My second user field	
<input type="checkbox"/>	Text 3		
<input type="checkbox"/>	Text 4		
<input type="checkbox"/>	Text 5		
<input type="checkbox"/>	Text 6		
<input type="checkbox"/>	Text 7		
<input type="checkbox"/>	Text 8		
<input type="checkbox"/>	Text 9		
<input type="checkbox"/>	Text 10		
<input type="checkbox"/>	Text 11		
<input type="checkbox"/>	Text 12		
<input type="checkbox"/>	Text 13		
<input type="checkbox"/>	Text 14		
<input type="checkbox"/>	Text 15		
<input type="checkbox"/>	Text 16		
<input type="checkbox"/>	Numeric 1		

Active

Check On to activate the user field.

Type

User field type. Select the data type you want to enter in the user field:

- **Text:** User field with letters and numbers.
- **Numeric:** Numeric field.
- **Yes/No:** True/False.
- **Date:** Date format.

Title

Title of the user field. It will appear in the User Sheet.

7.9 Results sheet

The Results sheet shows the breeding and farrowing performance of a female's current parity, and also her lifetime average. It is used to quickly view her current status and reproductive history.

You can change this list to your preference by adding or removing variables. See [Result sheet](#).

7.10 Services sheet

The Services sheet lists all the services chronologically for the lifetime of the female. It includes the date of service, service type, boars or semen used, and the service result by days of gestation.

Service **Type** is designated by the following codes:

- A** Artificial insemination
- M** Natural mating
- C** Combination mating
- I** In with male but mating not observed
- E** Embryo transfer

7.11 Notes sheet

Enters any notes you wish to make about the female on this sheet. To skip a line use the Ctrl + Enter keys.

7.12 Genealogy sheet

Shows the family history of the selected animal back to its grandparents. For data integrity, it is only possible to enter the sire and dam for each animal. Porcitech generates the entire genealogical tree from the sire and dam of each animal recorded in the database. Often, ancestors are purchased outside of the farm and they are not recorded in the database, consequently they do not appear in the tree. In this case, it is necessary to add the ancestors in the Individual Pig Records file, selecting **Only Reference** in the **Origin** field.

7.13 Parity sheet

The Parity sheet lists the farrowing information for each parity. Listed are the date of farrowing, total born, liveborn, stillborn, deaths, weaned, weight, and date of weaning.

7.14 Photos sheet

If desired, will show photographs of the animal selected. The files of these photos should be put in the *Photos* directory.

7.15 How to: Modify an erroneous pregnancy check

It may be that a female has been diagnosed as pregnant, but later the diagnosis is found to be negative. In this case there are two possible options to change the female's pregnancy status:

Modifying the status in the Females File

This procedure will edit a previously entered pregnancy check event.

1. Select the female in **Female** file.
2. Double click the previously entered pregnancy check event.
3. Select **Negative**.
4. Click **Ok**.

Modifying the status in Batch Entry

This procedure will add another pregnancy check event to the female's record. Although the previously entered pregnancy result will remain in her record, her pregnancy status will be changed to the new result.

1. In **Event Entry**, select **Pregnancy Check** in the Events dialog box.
2. Enter the the date of the check in the **Date** column and the **Id** of the selected female in the **Code** column.
3. In the **Result** column, enter a minus sign(-).
4. Click **Process Sheet**.

7.16 How to: Search by last digits of Id

In cases where the first part of an animal identification is not important because it refers to the country of origin or other non-specific information, or may be missing due to a broken tag, it may be useful to search for an animal using only the last digits of the ID, or Register ID (alternate ID).

For example, if you can read only '58' as the last 2 digits on the tag:

1. Open **Current Status Females** report
2. In the Filter list, select **User Filter**
3. If you want to filter for the primary ID, in the filter box, type: IDCODE LIKE '%58'
4. If you want to filter for the alternate, or Register ID, type: REGISTERID LIKE '%58'
5. Click **Ok**

7.17 Calculate Contemporary Groups

A contemporary group contains animals which were tested at the same time and were treated alike, so they had an equal opportunity to perform. For reproduction traits, the group includes sows of the same breed that farrowed at the same time.

It is necessary to execute **Calculate Contemporary Groups** periodically to calculate and update the average herd values of contemporary groups used in the **SPI** and **BVSP** formulas.

Litter weights must be entered at weaning for these formulas to be calculated.

The **Calculate Contemporary Groups** function is located in the **Farm** menu at the top of the **Porcitech** main menu screen.

Contemporary Groups Interval

Interval in weeks to form the contemporary groups. It is advisable to select enough weeks to include at least 30 litters but it is also better to keep the period length short.

Recalculate

Period used to recalculate the groups.

Select **All Data**

- the first time you perform this calculation
- if you have modified events older than one year
- after you rebuild the database

Select **Last Year Data** to periodically update the contemporary group data after new weaning events are entered.

Sow Productivity Index (SPI) provides a measure of sow productivity and is especially useful for making culling decisions or selecting for selecting the dams of replacement females. Prolificacy is measured by the number of pigs born alive in a litter adjusted for parity. Milking ability is measured by the weight of the litter adjusted to 21 days of age.

SPI is defined as:

$$\text{SPI} = 100 + 6.5(L) + W$$

Where

L = the adjusted number born alive record on the dam minus the average of the adjusted number born alive records of her contemporary group.

W = the adjusted 21-day litter weight record on the dam minus the average of the adjusted 21-day litter weight records of her contemporary group.

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VIII

8 Individual file

8.1 Individual file

Individual Pig Records is for managing a growing animal individually. The animal may be raised for special purposes such as for sale or replacement as a breeding animal, or for showing at competition. This file allows the recording of values like birthdate, sire, dam, genealogy, weight gain, condition, treatment, heat detection, and other details for an animal individually.

If young animals are being raised for replacement into the breeding herd, they are referred to as **prospective breeding** animals. In this case, the function of **Individual Pig Records** is to record information such as sire, dam, breed and birthdate, so when the animal is selected to enter the breeding herd, this data can be transferred automatically to the animal's record without having to re-enter the data. Use the **Move to Breeding Herd** event to transfer the animals into the breeding herd Female file. They will be given an Entry date with the same date as the move event.

Note: Prospective breeding females added into Individual file are not counted in breeding herd inventory until the date they are entered into the Female file using the Move to Breeding Herd event.

The **Origin** value in the status sheet check if the animal was **Raised** on your own farm, or **Purchased** from an external source. **Reference Only** is used to record information for animals you do not have on your farm, such as for genealogy records. If this is checked, the animal is not counted in inventory and will not be included in reports.

8.2 Events

8.2.1 Location

This defines the locations of the farm. It is only necessary to define locations if you use Group File, automatic feeding systems, or RFID for locations.

Location

Location ID.

Capacity

Number of head allowed in this location.

Stage

Related stage for this location. A group can be defined by its stage of production. For example, a **nursery pig** may be up to 70 lbs live weight, then may move into the **finisher** stage. In some farms there may be only one stage defined, for example Pigs can move directly into the **finisher** stage at weaning. You may want to create a stage for **breeding** to record the purchase of replacement females and the sale of breeding culls. You may define several stages (hot nursery, cold nursery, pre-grower, grower, pre-finisher and finisher). This system is flexible enough to be applied to any management system. **Production Stages** must be predefined in the **Options** section. When you create your Group, its stage is tied with the group using the current location.

EID

Electronic ID for the location. The RFID handheld can read location values directly from the transponder instead of typing them.

Location Managed by Automatic Feeding System

Some Automatic Feeding System devices need location information. Check this box to send the location data to the device.

8.2.2 Treatment

This event is used to record any treatments given to animals. These will include any medications or vaccinations used to treat or prevent any disease or injury.

Event Date

The date of the event.

Female Id

Code or Id of the animal.

Treatment

The medication or vaccine used. Treatments must be previously coded in **Options**.

Dose

The dosage used in the treatment.

Units

Units type.

Route

Route of administration of the treatment.

Treatment Days

The number of days duration of the treatment.

Withdrawal

The number of days the treatment must be withdrawn and the animals held before slaughter.

Reason

The reason the treatment is administered. Reasons must be previously coded in Options.

Technician

The technician administering the treatment.

Receipt

Receipt or Document ID of vet. It updates the last receipt value in **Options / Treatments**.

New Location

Record a new location if the animal is moved for, during, or after treatment.

Comment

Any user comment.

See also:

Treatments

8.2.3 Physical condition

With this event you can record the date and some physical measurements, such as weight, girth, height and score at various points or events in the animal's life.

Type

Optional field to define the type or class of the measurement event. It can be used in advanced reports to compare up to three Physical Condition events side by side for each animal using the IID_LstPCondition variables. You usually can ignore this field.

8.2.4 Heat not served

To monitor the estrous cycle of a female, a **Heat Not Served** event may be entered for a female who is observed to be in heat but is not mated. The program will then estimate the date of her next heat, based on the number of days of a regular estrous cycle, as specified in **Options** Time intervals for the Heat Not Served event.

Event fields: Event Date, Heat Control, Technician, Comment

8.2.5 Comment

You may enter a **Comment** into the record of an animal. Only the Comment event with the **latest date** will be displayed in the Status sheet of the female file and also in the parity column of the Female History Card.

8.2.6 Change field value

This event changes the value of the status of the animal. It is most commonly used to easily change the animal ID when a temporary ID is replaced by a permanent ID, such as when applying a farm tag to a replacement female already identified with a supplier tag.

If you want the original ID to become the register or alternate ID when new tag is applied, you can configure in the Options menu in On/Off to automatically move the primary ID to the register ID field when the primary ID is modified.

Type

Select the field name to change. You have a choice of Animal ID, Electronic ID, Register ID, and several user fields.

New Value

New value that will replace the current value.

8.2.7 Feed in

This tracks the feed consumed by an animal individually. This area of data entry is essentially designed to view data received from electronic feed systems, since manually entering feed weights and associated information per individual on even a moderate-size herd is often considered to be excessively time-consuming.

8.2.8 User event

There are three User events that allow the entry of any custom event into the record of an animal.

For example, you might want to record blood test results, see Serology results for more information. Or you might want to create a User event called "Post-birthing". Then all comments pertaining to birthing can be entered using this user event. It is used for filtering when creating reports. Also, it can be used for trial purposes, by defining a subset of females and comparing variables.

8.2.9 Offspring weaning

Weans the individual from the dam. It indicates when the individual is separated from the dam. It automatically adds the weaning event in the dam history when all individuals of the litter have been weaned. See **Automatically dry off the dam with Individual wean** at Options.

See also:

On/off

8.2.10 Transfer to breeding herd

This event moves an animal from the **pig** file to the appropriate **Females** or **Males** file when they are ready to enter the breeding herd, and adds the Enter event to the appropriate Female or Male file. Fields such as genetics, sire, dam, origin, etc are also transferred.

Code

Current Id code.

New Code

New Id code to be assigned in the male or female files (optional).

New Location

Location to be assigned in the male or female files (optional).

Weight

Present weight of animal (optional).

Transferring a batch of females to breeding herd

1. Click **Event Entry** button at main menu.
2. Click **Batch** (one event).
3. Click icon for Individual records.
4. Select **Transfer to breeding herd** event.
5. Click **Fill-in** button.
6. Select **Fill rows with result of a filtering**.
6. Now select your filter, usually Arrival Date, and enter the date range.
7. The grid will fill automatically. Click **Process** button to transfer the animal records to the breeding herd.

8.2.11 Removal

The elimination of an animal from the herd is recorded with a Removal event. The Removal Type (death, slaughter, or transfer) must be entered along with the reason for her removal. Once the animal is removed, she becomes inactive, although the data remains in the database. The animal can be restored into the herd by simply deleting the Removal event.

Event fields: Event Date| Removal Type| Removal Cause| Weight| Comment

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IX

9 Male file

9.1 Boars

In the Male file you will code the breeding males used for natural matings, and semen collection on the farm. (Purchased semen can be recorded directly into the Semen file.)

Each male can have an alphanumeric Id of up to ten characters. You can record birthdate, genetics, sire, dam, and other information. Males used for semen collection can have a semen collection event added to their file which will automatically add the semen inventory to the Semen file.

9.2 Events

9.2.1 Location

This defines the locations of the farm. It is only necessary to define locations if you use Group File, automatic feeding systems, or RFID for locations.

Location

Location ID.

Capacity

Number of head allowed in this location.

Stage

Related stage for this location. A group can be defined by its stage of production. For example, a **nursery pig** may be up to 70 lbs live weight, then may move into the **finisher** stage. In some farms there may be only one stage defined, for example Pigs can move directly into the **finisher** stage at weaning. You may want to create a stage for **breeding** to record the purchase of replacement females and the sale of breeding culls. You may define several stages (hot nursery, cold nursery, pre-grower, grower, pre-finisher and finisher). This system is flexible enough to be applied to any management system. **Production Stages** must be predefined in the **Options** section. When you create your Group, its stage is tied with the group using the current location.

EID

Electronic ID for the location. The RFID handheld can read location values directly from the transponder instead of typing them.

Location Managed by Automatic Feeding System

Some Automatic Feeding System devices need location information. Check this box to send the location data to the device.

9.2.2 Treatment

This event is used to record any treatments given to animals. These will include any medications or vaccinations used to treat or prevent any disease or injury.

Event Date

The date of the event.

Female Id

Code or Id of the animal.

Treatment

The medication or vaccine used. Treatments must be previously coded in **Options**.

Dose

The dosage used in the treatment.

Units

Units type.

Route

Route of administration of the treatment.

Treatment Days

The number of days duration of the treatment.

Withdrawal

The number of days the treatment must be withdrawn and the animals held before slaughter.

Reason

The reason the treatment is administered. Reasons must be previously coded in Options.

Technician

The technician administering the treatment.

Receipt

Receipt or Document ID of vet. It updates the last receipt value in **Options / Treatments**.

New Location

Record a new location if the animal is moved for, during, or after treatment.

Comment

Any user comment.

See also:

Treatments

9.2.3 Physical condition

With this event you can record the date and some physical measurements, such as weight, girth, height and score at various points or events in the animal's life.

Type

Optional field to define the type or class of the measurement event. It can be used in advanced reports to compare up to three Physical Condition events side by side for each animal using the IID_LstPCondition variables. You usually can ignore this field.

9.2.4 Comment

You may enter a **Comment** into the record of an animal. Only the Comment event with the **latest date** will be displayed in the Status sheet of the female file and also in the parity column of the Female History Card.

9.2.5 Change field value

This event changes the value of the status of the animal. It is most commonly used to easily change the animal ID when a temporary ID is replaced by a permanent ID, such as when applying a farm tag to a replacement female already identified with a supplier tag.

If you want the original ID to become the register or alternate ID when new tag is applied, you can configure in the Options menu in On/Off to automatically move the primary ID to the register ID field when the primary ID is modified.

Type

Select the field name to change. You have a choice of Animal ID, Electronic ID, Register ID, and several user fields.

New Value

New value that will replace the current value.

9.2.6 Feed in

This tracks the feed consumed by an animal individually. This area of data entry is essentially designed to view data received from electronic feed systems, since manually entering feed weights and associated information per individual on even a moderate-size herd is often considered to be excessively time-consuming.

9.2.7 User event

There are three User events that allow the entry of any custom event into the record of an animal.

For example, you might want to record blood test results, see Serology results for more information. Or you might want to create a User event called "Post-birthing". Then all comments pertaining to birthing can be entered using this user event. It is used for filtering when creating reports. Also, it can be used for trial purposes, by defining a subset of females and comparing variables.

9.2.8 Offspring weaning

Weans the individual from the dam. It indicates when the individual is separated from the dam. It automatically adds the weaning event in the dam history when all individuals of the litter have been weaned. See **Automatically dry off the dam with Individual wean** at Options.

See also:

On/off

9.2.9 Semen Collection

The extractions of semen carried out on males are entered into this section. Its use from Data entry using Batch Entry automatically places the batches of semen in the corresponding files. All data introduced are assigned to the male record to carry out subsequent performance follow-ups.

9.2.10 Removal

The elimination of an animal from the herd is recorded with a Removal event. The Removal Type (death, slaughter, or transfer) must be entered along with the reason for her removal. Once the animal is removed, she becomes inactive, although the data remains in the database. The animal can be restored into the herd by simply deleting the Removal event.

Event fields: Event Date| Removal Type| Removal Cause| Weight| Comment

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10 Semen file

10.1 Semen

This file inventories batches of semen collected on the farm, or purchased from a supplier. It is also possible to enter the batches from Semen Collection, in Data entry using Batch Entry/Boars.

Date

Date of semen collection or purchase

Semen code

Code of semen batch

Donating male

Male donating semen

Initial doses

Number of doses collected or purchased

The Semen file is integrated with the Insemination event. When an artificial insemination mating is entered into a female's record, using a previously coded batch of semen, the Semen file will automatically update the following:

Date of first use**Date of last use****Doses used****Doses available**

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XI

11 Group file

11.1 Group file

This file manages groups or lots of animals to monitor feed delivered, growth performance, animal movements, expenses, sales and other related events. The Group file is used in species where groups of animals are co-mingled from within the same production system. Tracking of animals is achieved by recording group movements and maintaining the required production records. It can manage any production stage: weaned, growing, and breeding animals. Note that animals may be tracked individually using Female, Male, or Individual Pig Records file but they may also be created as a group in Group file for financial purposes, such as recording feed consumed and animal sales.

Animals are not individually identified or separated in Group file. See Individual Pig Records file to track each animal individually.

Group file manages the weaned Pigs produced in the breeding stage, and usually refers to the period from weaning to sale. However it also may be used to enter financial or feed records to groups of breeding animals, even though these animals may be entered individually in the Female or Individual Pig Records file.

In farms that produce their own weaned Pigs to raise, the Weaning event can be configured to automatically add Pigs to the Group file. Every group created will correspond to a group or lot of Pigs. The group can be defined by a location, a cohort, weekly production, etc. depending on the farm organization.

Porcitech supports multiple production stages and several types of management systems: All-In / All-Out, Continuous Flow, Monitored Flow, etc.

ID

ID for the group. It must be unique and it cannot be reused.

Group Type

A group can be dynamic or static according to how they are managed . See Group type topic.

Register ID

Alternative ID

Initial Location

A group must always be tied to a location. The location for a dynamic group never changes. A static group may be relocated multiple times. Initial Location defines the first location of the group. The **New Group Location** event updates the current location value. Locations are defined under Options menu. See Locations topic.

Open Date

Creation date of the group.

11.2 Group management system

Basically there are three types of management systems for groups:

All-In/All-Out system

A definable number of animals are assembled and maintained for a definable period of time. The group is created and stays intact until all animals in the group are finally sold or transferred, and the inventory becomes zero. The financial and feed information is specific for each group. This is the most accurate method of record keeping and monitoring. In order to use this system, you must be able to record the feed being consumed on an individual group basis.

Monitored Flow system

This is very similar to the All-In/All-Out system except the feed or financial information is not specific for each group. For example, one bin may feed several groups in a location. As in the AI/AO system, the groups are created and remain intact until they are finally sold or transferred. The financial and feed information is entered using the **Cost Centers** which links groups fed from a common feed source.

Continuous Flow system

In this situation, animals are moved in and out on a continuous basis, with the group remaining permanently open. Groups of animals being moved in cannot be directly linked to the same animals being moved out. Feed is also delivered on a continuous basis and cannot be directly assigned to any particular age group of animals. This is the least accurate method of record keeping for grow-finish herds.

Which system am I using?

If you are not clear about which system you are using, then you must ask you the following two questions:

"Do you keep the animals in individual groups?"

If No, then the system is "Continuous Flow System"

If Yes, then the next question is "Can you record feed delivered to animals on an individual group basis?"

If No, then the system is "Monitored Flow system"

If yes, then the system is "All-In/All-Out system"

See also:

Cost Centers

11.3 Group type

When you first create a new group in **Event Entry** you will see a field for **Type**. If you are creating a new group in the group file, this field is in the **Current Status** sheet. You must define the group/lot type for reporting purposes.

Groups are defined as either static or dynamic, and are described in more detail in the section below.

The type is completely defined by the management system: Use Static if your management system is All-In/All-Out or Monitored Flow. Use Dynamic if your management system is Continuous flow.

Static Groups

- Static groups are a definable number of animals that are assembled and maintained for a definable period of time. Animals produced in an all-in/all-out production system are a typical example of a static group.
- Static groups remain intact as a group and may move from one premise to another.
- Live animals leaving static groups can be moved to a dynamic group within the same production system or to harvest without individual animal ID.
- Two static groups can be combined to form a new static group; i.e. the group inventory goes to zero and the group is ended.

Dynamic Groups

- Dynamic groups are location or premise-based groups that exist for an indeterminate amount of time and can have animals move in and out continuously. Animals produced in a continuous flow production system are a typical example of a dynamic group
- An animal can exist in only one dynamic group in a lifetime without individual ID.
- Live animals leaving dynamic groups can become a static group in the same production system or moved to harvest without individual ID.

Usually in dynamic groups, animals moved in cannot be directly linked to the same animals moved out. To determine your group type, consider if the inventory in a group of animals regularly returns to zero and the entire group is "closed-out". If so, use the Static definition. If the inventory in a location rarely returns to zero, then you have a Dynamic group of animals.

11.4 Recording group data

All-In/All-Out system

1. Create a new group and add animals of similar age using Weaned in, Move In, Purchase, or Inventory events. Maintain the group system throughout the growing period, and close the group once all animals are moved out or sold and inventory is 0.
2. Record the feed delivered to each individual group. If this information is not available, then see Monitored Flow system.
3. Enter expenses, other than feed and animal purchases, using the **Financial / Account Purchase** option. Enter the group ID in the Cost Center box.

Monitored Flow system:

1. Create a new location in Options for the Monitored Flow group.
2. Create a new Cost Center record, which is where you will add the feed delivered, and link it with the location.
3. Open new groups (dynamic type) and assign each of them to one of the previously created location.
4. Add animals to each of the groups using Weaned in, Move In, Purchase, or Inventory events.
5. Enter Feed In or Ration In events directly into the Cost Center.
6. Enter expenses, other than feed and animal purchases, using the **Financial / Account Purchase** option.
7. Enter all other events into each individual group

8. Close the group once all animals are moved out or sold and inventory is 0.

Continuous Flow system

1. Create a new group and add animals, using Weaned in, Move In, Purchase, or Inventory events.
2. Record the feed delivered to the group directly into the group record.
3. Enter expenses, other than feed and animal purchases, using the **Financial / Account Purchase** option. Enter the group ID in the Cost Center box.

See also:

Group management system

Cost Centers

Production stages

Locations

11.5 How to begin working with group

Introduction to Production and Financial Data

Group data can be classified into two types: production and financial. For example, the purchase of growing animals contains production data (number of animals and weight) and also financial data (monetary amount).

If you enter events into the group file, you will get production and growth performance data, as shown in the **Group Reports**. The group file also includes some basic production-financial events such as purchases and sales.

You can choose to record and enter as much or as little data as you want. You do not need to utilize the financial accounts if you only desire growing production reports.

If additionally you want reports of your financial data, you will need to define your accounts in **Options** under **Financial|Accounts** which will be explained below.

Getting Started

Before you create your Groups and begin entering events, you must define some options:

Define your weight measurement

Depending on your country, you may choose between Metric (kg), or Imperial (lb) weight systems.

1. Click Options menu
2. Application Format
3. Unit System. Choose Metric for kilograms, or Imperial for pounds.

Important!: Once you have selected your preferred weight system, you must use only one weight unit globally throughout Porcitech. You cannot mix pounds, tons, bags, cwt, etc. For Imperial system we suggest to use the pound, for Metric system the kilogram. This applies to all feed and weights of animals.

Define your production stages

The production stages you define are used as filters in the group and financial reports. Consider how you may want to filter reports when you define your stages. Stages are not necessarily locations. For example, you may have several locations in the nursery stage. If you will want some reports to show all nursery stage, then define only one nursery stage. Entering a location when you create your Group will create additional filters you can use for lower level reporting.

1. Click Options
2. Click Production Stages
3. Define one or more stages according to your production system. Some farms define only one stage as growing, others may define multiple stages, such as nursery, growing, and finishing.

Define your locations

Each group is always tied to a location.

1. Click Options
2. Click Locations
3. Define one or more locations and tie them with stages.

Adding new Group to the database

Each record in the group file is a group or lot of animals that may be in any production stage. We use group to refer indistinctly to any group of animals whether they be defined as a cohort or by their location. Each group can have one or more events added to its record. The event specifies the movement of Pigs, feed delivered, treatments, purchase, sales, or other data.

The Create Group event

The first event for any group is the Create Group event, whether for a new static cohort of Pigs or when defining a new dynamic group. With this event you will create your new Group, define the type of group and location, and establish the beginning inventory for the group.

1. Click **Farm** and then **Event Fast Entry** in main menu.
2. Click **Group icon** (mouse over the icons to see the text)
3. Enter the beginning Group date.
4. Select the **Type:** either **Dynamic** for continuous flow, or **Static** for All in/All out or Monitored Flow.
5. Enter the **Location**, which you have previously defined in Options.
6. Enter beginning inventory and total weight of all animals.
7. Now if you go to the **Group** file, you will see the group records you have created.

If you had your growing database converted from another software program:

Some fields may not have converted. It is important to verify that your Groups are properly defined.

1. Click the **Group icon at the main menu**. In the left panel you will see the list of open or active Group IDs. In the main screen you will see the list of events for the selected ID.
2. Click **Current Status** sheet and verify that the **Type**, and **Location** fields are defined for each Group. This is important because you may want to use these fields as filters in reports.

You may also do this for any closed or historical group if you want them included in filtered reports. In the **View Box**, select All or Inactive to see the list of Ids.

Adding additional animals into the group record

You can add additional animals to a Group record in several ways:

- **Weaned In:** One or more animals are moved from the breeding stage at weaning into a growing stage.
- **Wean Event (Female file):** Animals are automatically added using the female Wean event. You must enter the destination in the group **Id** field of the Wean event. You can turn this field on in Options/Event Fields/Females/Weaning.
- **Purchase:** Used when you purchase group animals from an external farm (or you may want to assign a value to your own raised animals).
- **Move In:** One or more animals are moved in from another group Id within your production system. When you enter a Move In event, the corresponding Move Out event is automatically created in the corresponding group.

Removing growing animals

Animals are removed from a group in several ways:

- **Sell:** Event used when you sell group animals.
- **Move Out:** One or more animals are moved to another group Id within your production system. When you enter a Move Out event, the corresponding Move In event is automatically created in the corresponding group.
- **Death**

Note: When all animals are removed from a Static group and the inventory becomes zero, the last event for a static group must be a **End Group/Lot ID** event. This event changes the status of the group from active to closed. Only static group/lots with 0 inventory can be closed.

Financial

If you want to record financial data for financial reporting, you must define your chart of accounts. At minimum you may want to code accounts for animal sales and purchases and feed. The following events in the group file have a field to enter the appropriate income or expense account:

- Purchase
- Sell
- Feed In

To create an account:

1. Click **Options**
2. Click **Accounts** under the **Financial** section
3. Click **Add** to add a new account
4. Enter the **Id** and description for the account
5. In **Type**, click if the account is an **Income** or **Expense** (you may also use a subcategory)
6. In **Group**, select the appropriate category.
7. Repeat the above steps for each account you want included in your reports.

For other farm-related expenses that are not entered directly with a group event, you may add them using the **Financial** file. To access this file click the **Financial** button on the icon menu, or select **Farm** and then **Account Registry List** from the main menu. For example, a tractor purchase can be entered into the Financial file. You may allocate an expense or income to a group Id, by selecting the appropriate group Id from the Cost Center box.

All income and expenses that you want to record for the farm must first be defined in the **Accounts** section in **Options**, whether they will be entered from the growing file or the financial file.

It is important to note that using the **Financial** file to record animal sales or purchases does not modify the inventory in animal files. For example, if a group purchase is entered using the **Account Registry List**, the inventory is not updated in the group file. You must use the events in the animal files to record inventory changes.

11.6 Group setup examples

11.6.1 Nursery, pregrowing, growing and finisher

Layout:

This is a common farm setup in many regions of North of America. There are four stages: nursery, pre-growing, growing and finisher.

Nursery, pre-grower, and growing are all in/all out (static). After weaning, a group enters into the nursery, then it is moved to pre-growing, then to growing. Finally all groups enter the finisher which is continuous flow (dynamic).



Nursery: All pigs are weaned into one room and stay at this location for 28-35 days (Depending on the operation and number of Nursery rooms)

Pre-Grower: All pigs from one Nursery room are moved into one pre-growing room.

Grower: All pigs from one pre-growing room are moved into one Grower Room

Finisher: All pigs from one or more Grower Rooms get moved into one large Finishing location where there are many pens and there may be Finisher Pigs still in the room from a previous move.

Usually, there is a silo (feed bin) or (feed location) for each stage (N, PG, GR, FN). Sometimes there are 2 for each stage, one for each sex. Feed is usually made on the farm for each stage as required or as the feed bins get empty. This grinding if the feed is independent of pig movement. The feed bins get filled no matter when the pigs are moved. In other words, the pig movements are made weekly but feed is made every 2 days approximately for each stage.

Periodically, usually after one month, the total amount of feed made per stage of production and the number of pigs moved through each stage is known plus the inventory in each stage.

Requirements:

We want to know the mortality and inventory for each group in N, PG, GR, and FN. For the entire farm, we want to know the Average Daily Gain (ADG) and the Feed Conversion (FC).

ADG (Average Daily Gain) is only accurate in each stage if the producer is weighing pigs IN & OUT of each stage. This is a big job to weight pigs every week IN and OUT of each stage and most producers do not have time to do this, although estimates could be done.

How to set up:

Nursery, Pregrowing and Growing are Monitored Flow system (blue color in the above figure) since the producer cannot know the feed consumed by each group but the groups are created and remain intact until they are finally sold or transferred. A feed bin is shared by several groups.

The Finishing rooms are Continuous flow (green color in the above figure).

1. Create 4 stages in Options / Stages: Nursery (N), Pregrowing (PG), Growing (GR) and Finisher (FN)
2. Create 4 locations in Options / Locations: LN, LPG, LGR and LFN
3. Create 1 dynamic group: FINISH and assign the corresponding location. This group is also a Cost Center.
4. Create the remaining 3 Center Costs, one for each feed bin of the Monitored Flow system: N, PG and GR

How to enter data:

- To create the Nursery groups, you can either use the wean event of the breeding female and move weans in directly when the female is weaned, or Fast Event Entry / Groups / Create Group event.
- To enter feed delivered for Monitored Flow units, go to Fast Event Entry / Cost Center / Feed In event.

Enter the feed delivered for each bin feed.

- To enter feed delivery for Continuous Flow unit, go to Fast Event Entry / Group / Feed In event.
- To enter additional expenses, go to Financial, select Account Purchase, enter the information. In the Cost Center box, attach the expense to the desired Cost Center.
- To enter deaths, animal sales, etc., go to Fast Event Entry, select Groups, and enter the animal events for each group.

How to get the results:

- To get a list of deaths, sales, etc., go to Reports / Groups section.
- To get the totals for each group (deaths, sales, ...) by period of time, go to Reports / Groups / Dynamic Group Performance report. Select Periods in the breakdown option and then enter the group ID in the filter. The information relative to feed consumption and conversion must be ignored. You can easily create a custom report to show the desired information.
- To get the conversion rate of a stage by period of time, go to Reports / Groups / Dynamic Group Performance report. Select Periods in the breakdown option and then enter the stage in the filter.
- To get the conversion rate by stage, go to Reports / Groups / Dynamic Group Performance report. Select Stage in the breakdown option and then enter the period in the filter.

11.6.2 Only dynamic groups

This example shows how to set up Porcitec if your growing production system is Continuous Flow. For example, if the farm has 3 stages: Nursery, Growing and Finisher, first define them in Options:

1. Click **Options** and then **Production Stages**
2. Enter the 3 stages: **Nursery**, **Growing** and **Finisher**

Generally you will want to define a Group/Lot ID for each location or stage. You can have more than one location per stage. For this example we will create three Group/Lot IDs:

1. Click **Animals** and then **group**
2. Create three group IDs: **NUR**, **GRO** and **FIN**. For each group ID, edit the current status sheet and select the appropriate production stage in the Stage list box.

Each group ID, or stage, may be considered a Cost Center. In Financial you can assign expenses to a specific cost center, or divide an expense and allocate a percentage to each cost center.

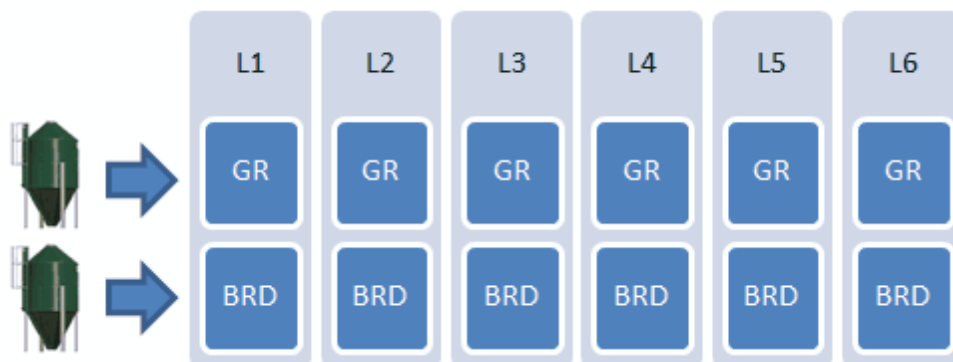
For example, the veterinarian visits the farm and the bill is \$1000. We can divide the cost between each stage or group ID. Click **Financial** and enter a portion of the expense for each cost center, by selecting the appropriate Cost Center ID for each entry.

11.6.3 Six lines and breeding females

Layout:

A farm has 6 production lines (L1, L2, ... L6). Each line is formed by one breeding location (BRD) and

one growing location (GR), both continuous flow. There are only two silos for the entire farm: one for growing and one for breeding, feeding all lines.



Requirements:

The user wants to know the performance by each production line in order to check the management and genetics results. Each line can have a different management and/or genetics. Also, the user wants to know the conversion rate for the total of growing stage. Finally, it is required to know the conversion rate of the global of the farm, including breeding stage.

How to setup:

1. Create 2 stages in Options / Stages: Breeding and Growing.
2. Create 2 locations, LOCBRD and LOCGR in Options / Locations.
3. Create 6 groups for breeding: BRD1, BRD2, ..., BRD6 and assign the corresponding location
4. Create 6 groups for growing: GR1, GR2, ..., GR6 assign the corresponding location
5. Create 2 Center Costs, one for each feed bin: COSTGR and COSTBRD

How to enter data:

- To enter feed deliveries, go to Fast Event Entry, select Cost Center and using Feed In event, enter the feed delivered for each bin feed (COSTGR or COSTBRD).
- To enter additional expenses, go to Financial, select Account Purchase, enter the information. Use COSTGR or COSTBRD in the Cost Center box.
- To enter deaths, animal sales, etc., go to Fast Event Entry, select Groups, and enter the animal events for each group.

How to get reports:

- To get a list of deaths, sales, etc., go to Reports / Groups section.
- To get the totals for each group (deaths, sales, ...) by period of time go to Reports / Groups / Dynamic Group Performance report. Select Periods in the breakdown option and then enter the group ID in the filter. The information relative to feed consumption and conversion must be ignored. You can easily create a custom report to show the desired information.
- To get the conversion rate of a stage by period of time, go to Reports / Groups / Dynamic Group

Performance report. Select Periods in the breakdown option and then enter the stage in the filter.

11.7 Group events

11.7.1 Create Group

This event only exists in Event Entry and it creates a group. With this event you will create your new group of animals, define the type of group and location, and establish the beginning inventory for the group.

Event Date

Date the group is created.

group Id

The Id you assign to the group. You may enter up to 10 characters in this field.

A note about creating group Id's: Id's can be used as a filter for group reports. Consider the information you will want from your reports. For example, you may want to code all nursery groups beginning with the letter "N". Then if you want to run reports to look at nursery performance only, you can add the filter "N:" in the report parameters. Likewise if you have more than one location for your nursery, in addition you might want to include a code for the barn or room, for example the filter for Nursery Barn 2 would be "N2:". Now you can run reports looking at only those groups that have been in this stage and location.

Type

Select the type of growing group. A group is either **Static** as in "All in/All out", or **Dynamic** as in "continous flow".

Stage

Select the appropriate production stage that you have previously defined in **Options**.

Location

Enter the location for the group. You can use up to three levels, such as Barn, Room, Pen.

Number

The number of animals in the group. When creating a **Dynamic** group for an existing location already occupied by animals, this number will be the current inventory on the date the group is created. For a **Static** group this number will be zero. The inventory for a static group is established with a **Weaned In**, **Move In**, or **Purchase** event.

Weight

Total weight of the current inventory.

Comment

Any user comment.

11.7.2 Move in

The **Move In** event is used to move one or more Pigs into a group Id from another existing group Id.

The **Move In** event will automatically generate a corresponding **Move Out** event in the group from which the Pigs were moved from if you enter the origin in the **Origin group Id** field.

On the main menu click **Event Entry**, select **group**, then select **Move In**.

Fields

Event Date

Date the Pigs are moved in.

Animals

Number of Pigs moved into the lot.

Total Weight

Total weight of the Pigs.

Average Age

Average age in days of the Pigs. (Optional)

Origin group Id

group Id of the group the Pigs were moved from. Entering the Id in this field will generate a corresponding **Move Out** event in the originating group.

11.7.3 Move out

The **Move Out** event is used to move one or more Pigs from a group Id into another existing group Id.

The **Move Out** event will automatically generate a corresponding **Move In** event in the group to which the Pigs are moved if you enter the destination in the **Destination group Id** field.

On the main menu click **Event Entry**, select **group**, then select **Move Out**.

Fields

Event Date

Date the Pigs are moved out.

Animals

Number of Pigs moved out.

Total Weight

Total weight of the Pigs.

Average Age

Average age in days of the Pigs. (Optional)

Destination group Id

group Id of the group the Pigs are moved to. Entering the Id in this field will generate a corresponding **Move In** event in the destination group.

11.7.4 Weaned in

This event is used to manually enter weaned animals into the growing stage. Weaned Pigs leave the farrowing barn and are placed in a growing facility with the **Weaned In** event. Animals can originate from one or several litters.

Fields:

Animals

Number of animals.

Total Weight

Total weight of animals.

Average Age

Average age of animals in days. (Optional)

11.7.5 Wean event

This event is automatically added to the group/lot record when the breeding female is weaned and the group Id field in the female weaning event is used. It increases the group inventory and transfers litter information as sire, dam, age, number of animals and total weight.

11.7.6 Death

This event records the death of group animals.

Date

The date of the event.

group Id

The Id of the growing group.

Number

The number of animals that died.

Total Weight

The total weight of animals that died.

Reason

The reason they died. Death reasons must be previously coded in **Options**.

Deaths are subtracted from the inventory of the group.

11.7.7 Feed in

This event is used to record the amount of complete feed, ingredients, or feed medication delivered to a group or lot of Pigs. It is used in the calculation of growth performance and feed usage in group reports. (Note: if you have defined rations, use the **Ration In** event to deliver a ration.)

See Entering feed and rations topic

- All feed ingredients used on the farm must first be coded in **Options** in the **Feed or Ingredients** section.
- The Feed In event decreases the feed inventory.
- Enter negative weight values when you remove feed that the animals in the Group/lot ID will not consume.

Feed

Feed name.

Weight

Total weight of the feed delivered.

Cost

Total cost or value of the feed delivered. Feed cost is automatically calculated from the cost entered in **Adjust Feed Inventory** section of **Farm** menu, however you can type over it and enter a different value.

See also:

Rations

Feed or ingredients

11.7.8 Ration in

This event is used to record the amount of a ration delivered to a group or lot of Pigs for consumption. It is used in the calculation of growth performance and feed usage in group reports. Ingredients of each ration must first be entered in **Options/ Feed and Ingredients** and then each ration must be defined and formulated in **Options/ Rations**.

See Entering feed and rations topic

- The ingredients of the ration are detailed in the Feed Usage reports.
- The Ration In event decreases the feed inventory of each ingredient.
- The total cost or value of the feed delivered is calculated using the cost of ingredients.

Ration

Ration name.

Weight

Total weight of the feed delivered.

See also:

Rations

Feed or ingredients

Feed in

Make ration

11.7.9 Inventory

The **Inventory** event is used to record the actual physical animal inventory in a location or group of Pigs. It is important to take a physical inventory at the barn level on a regular schedule and verify that the record inventory is correct. Discrepancies between actual inventory and record inventory are usually due to unrecorded deaths or animal movements. It is best to reconcile any discrepancies as soon as possible.

The **Inventory** event is especially important for dynamic, or continuous flow, groups of Pigs. To calculate growth performance values at the end of a report period it is necessary to enter an **Inventory** event, including the weight of Pigs, on the same date, plus or minus one day. For example, if you desire quarterly reports you must enter an Inventory event at the end of each quarter. For growth performance values to be credible, weights of Pigs must be entered at the end of each report period to correctly calculate weight gain.

Date

Date the actual inventory count was performed.

Inventory

The number of Pigs counted.

Total Weight

The weight of all Pigs counted.

Comment

Any user comment.

11.7.10 Location

This event is used when an entire static group of Pigs is moved to a new location, but does not become a new growing Id. It does not change the productive stage, it simply specifies the new geographical location of the group.

11.7.11 Purchase

This event records the Pigs purchased from an external source. Optionally, you may want to assign a value to your own raised Pigs to know the exact cost of each stage.

Use this event only for the purchase of animals. Other account purchases may be recorded in **Financial/Account Register**.

See Financial management topic.

Animals

Number of purchased animals.

Total Weight

Total weight of purchased animals. (You must be unit consistent, use always the same unit system.)

Average Age

Average age of purchased animals in days. (Optional)

Account

The financial account you have assigned to this item, previously coded in **Options**. For financial reports, this field must be used. See [Accounts](#).

Amount

Total cost or value of purchased animals.

Supplier

Supplier Id to record the source of the purchased animals. Suppliers must be previously coded in **Options**.

11.7.12 Sales

This event records the pig sales to the packer or to an external farm. It decreases the inventory and weight in value. If the account field is filled, then the event is linked to the financial data.

Type

Type of sale, it can be a undetermined sale, growing sale or breeding sale, according to sold animals.

Number

Number of sold animals.

Buyer

Buyer Id for the sold animals.

Total Weight

Total weight of sold animals. You must be unit consistent, use always the same unit system.

Amount

Total amount of sold animals.

Account

Account used to link to financial data. To get financial reports, this field needs to be filled. See [Accounts](#).

Index

Index value supplied by the packer.

Back Fat

Back fat value supplied by the packer.

Lean

Lean value supplied by the packer.

11.7.13 Intra-database sell

This optional event records pig sales to another production stage within the same farm database. It is used to assign a value to animals in a growing Id to know the exact cost of each stage. If the account field is filled, then the event is linked to the financial data. This event is only available from Event Entry. It creates a sell and purchase event in the corresponding group Id.

Number

Number of sold animals.

Destination group Id

group Id of the group the Pigs are moved to. Entering the Id in this field will generate a corresponding **Purchase** event in the destination group.

Total Weight

Total weight of sold animals. You must use the same unit of weight throughout the program.

Amount

Total value of sold animals.

Purchase Account

Account used to link to financial data. To get financial reports, this field needs to be filled. See [Accounts](#).

Sell Account

Account used to link to financial data. To get financial reports, this field needs to be filled. See [Accounts](#).

11.7.14 Treatment

This event is used to record any treatments given to group animals. These will include any medications or vaccinations used to treat or prevent any disease or injury. Treatments must first be defined in **Options/Technical/Treatments**.

Event Date

The date of the event.

group Id

The group Id you have assigned to the group or lot of Pigs.

Number of Animals

The number of animals receiving treatment.

Treatment

The medication or vaccine used. Treatments must be previously coded in **Options**.

Dose

The dosage used in the treatment.

Units

Units type.

Route

Route of administration of the treatment.

Treatment Days

The number of days duration of the treatment.

Withdrawal

The number of days the treatment must be withdrawn and the animals held before slaughter.

Reason

The reason the treatment is administered. Reasons must be previously coded in Options.

Technician

The technician administering the treatment.

Receipt

Receipt or Document ID of vet.

New Location

Record a new location if the animal is moved for, during, or after treatment.

Comment

Any user comment.

See also:

Treatments

11.7.15 Close lot

When all the animals of a static (all in/all out) group/lot are removed (sale, death, move out...) and the inventory becomes zero, you must enter a **Close Lot** event. This will assign an end date to the group and the group is considered closed out.

When closing a group/lot, if there is an inventory discrepancy, the number of dead animals is adjusted. This is calculated from the number of entered animals - sold animals - removed animals.

11.8 Managing feed

11.8.1 Entering feed and rations

Getting started

Define your global unit of measurement

Depending on your country, you may choose between Metric (kg), or Imperial (lb) weight systems.

1. Click **Options** menu
2. **Application Format**
3. **Unit System**. Choose Metric for kilograms, or Imperial for pounds.

Important!: Once you have selected your preferred measurement system, you must use only one weight unit globally throughout Porcitech. You cannot mix pounds, tons, bags, cwt, etc. For Imperial system we suggest to use the pound, for Metric system the kilogram. This applies to all feed and weights of animals.

Add feed IDs

You must first enter all feed and ingredients used on the farm in the **Options** menu.

1. Click **Options** icon at the main menu.
2. Scroll down to **Feed** section and click **Feed or Ingredients**. If you had your database converted from another software program, you will see the list of feeds you had previously defined.
3. To add a new feed ID, click the **Add** button. Add all feeds and ingredients you will use on your farm.

This includes complete feed, ingredients to make rations, medications, and supplements.

Enter feed cost and inventory

Important! you can use only one weight unit globally throughout Porcitech. All prices must be entered per the same unit consistently, for example price per pound if using the Imperial system, or price per kilogram if using the Metric system.

Feed cost and inventory can be entered by one of two ways:

- Financial/Account register
- Adjust ingredient cost and inventory

If you buy bulk feed and wish to control feed inventory, enter feed purchases in Financial/Account Register. Feed cost will be assigned according to the purchase price. If you purchase feed that increases an existing inventory, the cost of the entire inventory is averaged.

Creating Rations

If you grind your own feed on farm you may want to create rations. Now that you have entered all feed and ingredients you will define your rations.

1. Click **Options** at the main menu.
2. Scroll down to **Feed** section and click on **Ration**.
3. Click the **Add** button.
4. In the **Ingredient** field click the drop down box and select each ingredient in the ration and enter the weight per batch.
5. In data entry, to enter Rations to the Group/Lot record, use the **Ration In** event. The cost of the ration will be calculated from the cost of the ingredients. You cannot overwrite it.

11.8.2 Produce ration inventory

The **Produce Ration** function, under **Farm** menu, creates a ration inventory using the ingredients and a formula that you have previously defined in Options/Feed/Feed or Ingredients, and Options/Feed/Rations. This function increases the inventory of the ration and decreases the inventory of the ingredients, according to the ration formula and the ration weight.

Note that this option only creates and increases a ration inventory. The ration inventory is decreased only by using the Ration In event in the Group/Lot record.

If you do not care to track the ration inventory and you consume the ration when it is made, then you do not need to use this option. See Ration In event.

Date

Date of the ration creation.

Ration

Ration name defined in **Options**.

Weight

Total weight of the ration created.

See also:

Rations

Feed or ingredients

Feed in

11.8.3 Adjust ingredient cost and inventory

When you take a physical inventory and it does not match the record inventory, you can adjust it using Adjust Feed Inventory. Additionally, if you do not wish to control feed inventory, enter feed costs here.

1. Click the **Farm** menu at the top of your screen.
2. Click **Adjust Ingredient Inventory**
3. Click the **Add** button and enter the **Ingredient** name from the drop-down box, the current inventory, and the price. If you do not care to control feed inventory you can enter 1 in the weight field.
4. The cost that shows in the **Feed In** event, or is calculated for rations, will coincide with the date of the Adjust Inventory cost.
5. **The last price entered for an ingredient is the price used** to calculate ration cost, so be careful to update feed prices concurrently with Group/lot feed in events. In other words, don't enter 2 months of feed prices, then enter 2 months of Feed In events in Group/lot record. It will use the last price updated regardless of the date.
6. In data entry, to enter complete feed and ingredients to the Group/Lot record, use the **Feed In** event. The cost will be calculated from the cost entered in Adjust Ingredient Inventory, but you can overwrite it and type anything in the cost field of the Feed In event.

11.8.4 Automatic Feeding System

An Automatic Feeding System (AFS) is based on individual feed supply controlled electronically. Porcitech supports several types of AFS, providing a powerful integrated solution. Click **Farm** in the main menu and then click **Synchronize Automatic Feeding System**.

Nedap-Velos

Web: <http://www.nedap-velos.com>

Installing Porcitech for Automatic Feeding System

1. Microsoft Framework 2.0 and 4.0 are required. You can download from Microsoft website if it is not installed in your computer.
2. Install Porcitech for network multi-computer environment mode and download and install Agritech Extensions package.

Operation

1. Go to **Synchronize Automatic Feeding System** and select **Nedap-Velos** option.
2. Click **Start** button to update the female data of the Automatic Feeding device.

Notes

- The female IDs need to be codified using only numbers since Velos does not support alphanumeric characters. Leading zeros in Porcitech are converted to numbers in Velos. For example 0035 in Porcitech database corresponds to 35 in Velos.
- In some Windows configurations, the Firewall may ask permission for Porcitech. It is necessary to approve it or Porcitech cannot connect with Velos.
- Females removed in Porcitech are not removed in Velos with the synchronization. You must remove them manually.
- By default, all locations are managed by the Automatic Feeding System. Use Options / Locations to define the locations not managed by the Automatic Feeding System

CompIdent (Schauer Agrotroic GmbH)**Operation**

1. Go to **Synchronize Automatic Feeding System** and select **CompIdent** option.
2. Enter the path of file name where the AFS data will be saved. Then you must use the import option of your AFS device to import the generated file.

11.8.5 Least-cost feed formulation

Rations module can calculate the formula according to the Least-Cost Feed strategy. Least-cost feed formulation is combining many feed ingredients in a certain proportion to provide the target animal with a balanced nutritional feed at the least possible cost. Though least-cost formulation is a mathematical solution based on linear programming, it requires the professional knowledge of animal nutritionists. Feed formulators also need to be aware of the variations of nutritional requirements for different genetics at various stages of their lifespan. The linear programming performs what it is designed to do and it is based on the information put in by the formulator. So in essence, the formulation program is only as good as the nutrient and ingredient parameters entered into it.

See also:

Rations

11.8.6 Weight gain

In a dynamic (continuous flow) situation it is recommended to record inventory with weights at the end of the time periods you want to run your reports. Ending weights then become beginning weights for the next period.

For example, the formula for "average daily live weight gain" includes the "ending weight of animals in the period minus the beginning weight". If you do not have inventory events with weights at the end of report periods (or column periods), the weight gain that occurred in the time period is completely missing from the calculation.

Therefore it is important to decide when you want to run growth performance reports, either monthly, quarterly, every 6 months, yearly, etc and then be consistent about taking inventory at the end of each period and enter weights, even if they must be estimated.

The formula for weight gain (Continuous-flow/dynamic) is:

Sum of live weights of finisher pigs at end of period

- sum of live weights of finisher pigs at beginning of period
- + sum of live weights of finisher pigs sold out of finisher in period
- + sum of live weights of finisher pigs transferred out of finisher in period
- sum of live weights of finisher pigs purchased into finisher in period
- sum of live weights of finisher pigs transferred into finisher in period

The beginning and ending weight components of the expression are only included if all groups in the report period have beginning and ending weight values. If one or more groups do not have both values, then the weight gain formula excludes the all weights and will show as 0.

The beginning and ending weights are extracted from inventory events. Inventory events must be entered up to 3 days before the period ends. For example, if you run a growth performance report every 6 months, you need to enter an inventory event for each group twice per year. Specifically you must enter them at December 29, 30 or 31 , and June 28, 29 or 30.

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



XII

12 Financial

12.1 Financial management

Financial management is important for monitoring the financial health of your farm or operation. In Porcitech you can keep track of your income and expenses, profit and loss, and know your cost of production. You will optimize your farm performance by analyzing the financial results. Financial management works with Accounts and Cost Centers.

An account is the category you assign to each item of expense or income. You must previously code your income and expenses in **Options** in the **Accounts** section.

A **cost center** is a profit-generating business segment whose manager seeks cost, revenue, or profit data. For example, if a producer sells weaned Pigs, the breeding herd can be considered a cost center. Likewise when selling market Pigs the growing herd can be considered a cost center. A cost center can also be a specific location, or a group/lot ID.

For example, a utility expense may be assigned to the Utilities account. However, if the utility expense was generated in the farrowing barn, you might want to assign it to the breeding herd cost center. You can allocate each income and expense to your own defined cost centers when you enter these items into the **Financial** file.

Porcitech works under the Accrual Principle. This principle means that revenue (expense) is recorded in the income statement at the time of the transaction that causes it and not at the time of the cash inflow (or outflow, for an expense). For example, the feed purchasing increases the feed inventory, and the feed expense (usage) decreases the inventory. Only feed expenses (usage) and not feed purchases are used in the financial reports. This method contrasts with cash basis accounting, which records transactions only when cash has been exchanged between the relevant parties.

A expense is defined as consumption of a resource. A revenue is defined as an influx of economic resource for the farm, coming from third parties and whose origin is generally a commercial transaction as animales sales.

How to enter financial data

Financial data should be entered into Porcitech according to its nature. Some financial data also involves production data, for example the purchase of animals. It affects production group reports using the number and weight values, and affects financial reports using the amount value. In the animal purchase example, you only need to enter the Purchase event in the group file. It should not be entered as an Account Sale in Account Registry form.

Type of information	Where to enter it
Purchase of animals	Group File
Sale of animals	Group File
Consumed feed (for All-In/All-Out or Continuous Flow system)	Group File
Consumed feed (for Monitored Flow system)	Cost Center File
Other expenses (utilities, labor, etc.)	Account Registry
Other income, not animal sales	Account Registry

See also:

[Account Registry List](#)

[Import financial data](#)

[Cost Centers](#)

12.2 Account Register

Income and expenses can be displayed and edited in the **Account Register** of the **Farm** menu for financial reporting. You must previously code your income and expenses in **Options** in the **Accounts** section.

Income may be sales of growing animals, breeding stock, or other sales. Expenses may be feed, medication, supplies, utilities, labor, taxes, insurance, etc.

Important: Sales of animals is derived from the animal record for financial reports. Do not use the Account Register for the sale or purchase of animals. Sales and purchases of animals that change the inventory in the group must be entered using the group events of the animal file. Entering Sales or Purchases using Account Registry List does not modify the productive data, so inventories are not updated unless the group events are used.

To add an entry to the Account Register:

Click **New** button. Select from **Account Purchase**, **Account Sale**, or **Feed Purchase**.

- Account Purchase, to enter purchases or expenses other than animals.
- Account Sales, to enter sales other than animals.
- Feed Purchase, will increase the inventory of feed and adjust the feed cost to the average for the entire inventory. It is not considered an expense at this point. The feed expenses are entered using Feed In or Ration In events into the Group record.

The following fields appears in the account form:

Date

Invoice date.

Reference

Invoice reference, usually a number.

Account

Account category you have assigned to the item in Options menu.

Comment

Any comment or memo.

Amount

Total invoice amount.

Cost center

Business segment to which you want allocate the income or expense. In most of cases, it is the group ID. See Cost Centers.

Weight

Total weight if it is applicable.

Units

Total units, for example number of animals or number of bottles.

Supplier

Supplier ID from whom you have purchased, previously coded in Options menu.

12.3 Import financial data

If you have an accounts program or other system, it is possible to import the financial movements to Porcitech as expenses or income. It is necessary for your system to generate a semi-colon (;) separated text file with the following enumerated fields:

1. Database alias
2. Date
3. Code for the expense or revenue
4. Units
5. Amount
6. Weight (if applies)
7. Provider or buyer ID
8. Comment
9. Code for cost center
10. Reference: Reference number for movement

The format file is text, modifiable using any editor such as Notepad. It looks something like this:

```
MyFarm;1/2/03;200200;6;5000;12.5;JOHN;FIRST PURCHASE;10850;1050
MyFarm;2/2/03;200100;2;2000;42.5;PAUL;SECOND PURCHASE;145;1051
```

In this example, the first line contains the following database alias = MyFarm, data: date = 1/2/03, expense id = 200200, units = 6, amount = 5000; weight = 12.5, supplier = JOHN, comment = FIRST PURCHASE, id of cost center = 10850, reference = 1051.

1. In main menu of Porcitech, click **Farm** and then click **Import Data**.
2. Select filter "**Generic Financial Text File**".

3. Select the file created before and click **OK**.

The data are imported directly to the financial file. You can view the data at **Account Registry List**.

12.4 Cost Centers

A cost center is a profit-generating business segment whose manager seeks cost, revenue, or profit data. A cost center can be breeding stock, growing stock, crops, etc.

Since feed consumed is usually the most important expense in a farm, it is common to define Cost Centers according to the availability of the feed data. For example a feed bin, an All-In/All-Out group, or a Continuous Flow location.

- The ID of an All-In/All-Out group is also the ID of this Cost Center.
- The ID of a Continuous Flow location is also the ID of this Cost Center.
- For Monitored Flow, where feed is consumed by more than one group ID, you must create a record in the Cost Center option to record feed delivered under the File menu. To create a new Cost Center, click **File** in main menu and then **Cost Centers**. Click **New Cost Center** button.

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13 Handheld computer

13.1 Handheld computer

A handheld is a palm size computer, which can be used to enter and/or consult farm data. Porcitech can manage one or more handhelds, even if they are of different brands or models, so the work to be done on one farm can be shared by several users. This is done by implementing a program called Quick Data System, or QuickData. This software which is installed in the handheld, allows you to enter and to query farm data, and communicate with the PC.

The collected data must be processed in Porcitech, to update the records and statistics. QuickData simply collects the data and periodically synchronizes it with the database of Porcitech for Desktop. This method allows you to modify the female events in Porcitech and enter data in QuickData simultaneously, since data processing occurs centrally in the same place.

Porcitech supports the following devices:

Pocket PC

Pocket PC device

Agrident RFID AIR 100/200

Pocket PC device with the Agrident RFID reader for electronic transponders.

Psion Workabout

Psion Workabout MX device. Note that it is not the Psion Workabout Pro device (Pocket PC)

QuickData works in touch screen devices, however Agritech recommends devices with a numeric keypad.

See also:

Install QuickData in a Pocket PC

Data entry using QuickData

Handheld control panel

Electronic identification

13.2 Pocket PC device

13.2.1 QuickData for Pocket PC overview

QuickData for Pocket PC is designed to enter data onsite at the barn level and periodically synchronize the records with Porcitech Desktop or a server.

Main features:

- Supports Radio-frequency identification (RFID)
- Supports barcode technology

- Synchronization with server in both ways. From device to server and from server to device.
- Synchronization via USB cable, Ethernet cable or Wifi. (Depending on Porcitech edition)
- Remote synchronization with Agritec Data Server, no PC is required in the farm. (Depending on Porcitech edition)
- Multi-farm: A single device can manage multiple farms.
- Female status validation in handheld device.

13.2.2 Install QuickData in a Pocket PC

Recommended hardware:

Device: Pocket PC

Operating System: Windows Mobile 6

RAM: 64MB or more

Required pre-installed software:

- 1) .NET Compact Framework 3.5
- 2) Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile

QuickData needs a pre-installed software in the device. Please see see Preparing environment.

Installing QuickData

For Porcitech to communicate with the Pocket PC, you must install the software ActiveSync 4.0 or higher for Windows XP, or Windows Mobile Device Center for Windows Vista or Windows 7. This software is usually provided with the Pocket PC or it can be obtained from <http://www.microsoft.com/windowsmobile/downloads/activesync41.msp> and <http://www.microsoft.com/windowsmobile/en-us/help/synchronize/device-center-download.msp>

1. Cradle the handheld device and make sure that ActiveSync or Windows Mobile Device Center has detected it.
2. Execute Porcitech as Administrator if UAC system is activated (Windows Vista or Windows 7 by default). Right click the Porcitech icon and select **Run As Administrator**.
3. In Porcitech, click **File, Options** and **Handheld Computer**.
4. Enter an **Id** for the handheld, for example 01.
5. Select Pocket PC in Model box.
6. Click **Install** QuickData.
7. In the handheld device, click **Start, Programs** and **QuickData** to start QuickData.

Possible error messages:

- "Access violation" when you install QuickData or test the connection:
Open Windows Mobile Device Center and verify there is a check mark in "Allow data connection on device when connected to PC".

- MissingMethodException. File or assembly name 'System.Data.SqlServerCe':

SQL Server Compact has not been correctly installed in the device. You must reinstall it again. Check that you are executing the correct file in the device.

- Can't find PInvoke DLL 'sqlceme35.dll'

Microsoft SQL Server 2005 has not been correctly installed in the device. You must reinstall it again. Check that you are executing the correct file in the device. In some cases, it is necessary to manually copy the sqlceme35.dll file from the desktop to the Window folder of the device. For example from C:\Program Files\Microsoft SQL Server 2005 Mobile Edition\Device\Mobile\v3.0\wce400\armv4\sqlceme35.dll

- Invalid Windows CE files

Execute Porcitech as Administrator (right click and select Execute as Administrator option).

See also:

Handheld computers

13.2.3 Preparing the environment

QuickData for Pocket PC requires *.NET Compact Framework 3.5* and *Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile* software to be installed in the device. This topic is a guide to prepare your Pocket PC if it does not have this environment.

Note: **Agritec cannot offer support for the installation of the necessary software environment since it is an external product.** Please contact your Pocket PC representative for installation or problems.

Please see <http://msdn.microsoft.com/en-us/library/bb986876.aspx> for more information.

Installing .NET Compact Framework 3.5 Redistributable

Click the following link and execute the installation program

<http://www.microsoft.com/download/en/details.aspx?id=65>

Another option is to copy manually the corresponding CAB file into the Pocket PC and then execute it. The file name is **NETCFv35.wm.armv4i.cab** and the default location is C:\Program Files\Microsoft.NET\SDK\CompactFramework\v3.5\WindowsCE

Microsoft SQL Server Compact 3.5 SP1 for Windows Mobile

Click the following link and execute the installation program

<http://www.microsoft.com/download/en/details.aspx?id=17020>

Next you must install Microsoft SQL Server by manually copying the .cab files to the device. On the desktop computer, start Windows Explorer and navigate to the folder drive:\Program Files\Microsoft SQL Server Compact Edition\v3.5\Devices\wce400 or wce500\CPU architecture type.

Note: Files in wce400 are designed to run on devices that are based on Windows CE 4.X such as Pocket PC 2003 devices. Files in wce500 are designed to run on devices that are based on Windows CE 5.X such as Windows Mobile 5.0 and Windows Mobile 6 devices.

Use Windows Explorer to copy the **sqlce.platform.processor.cab** file to a folder on the device:

For example, if you have a Pocket PC 2003 device, you must copy:

C:\Program Files\Microsoft SQL Server Compact Edition\v3.5\Devices\wce400\armv4\sqlce.ppc.wce4.armv4.cab

Another example, if you have a Pocket PC 2005 device, you must copy:

C:\Program Files\Microsoft SQL Server Compact Edition\v3.5\Devices\wce500\armv4i\sqlce.ppc.wce5.armv4i.cab

Finally, in the device, click **Start, Programs** and **File Explorer**. Execute the file that you have copied in the above steps.

To check that it is installed, on the device click **Start, Settings, System, Remove Programs** and you will be able to see **Microsoft SQL Mobile 2005**.

There are devices with the same name that use PPC2003 or PPC2005 depending on the manufacturing year. For example, the new Psion Workabout Pro comes with Windows CE 2005 but also with 2003 if it is older. You can see the operating system in Settings / System / About.

Additional resources

The optional string resource assemblies are optional to reduce the footprint of .NET Compact Framework or SQL Server. To get a more useful error message out of the device the appropriate cab must be installed.

Install sqlce.dev.ENU.ppc.wce4.armv4.cab file for SQL Server diagnostics

Install NETCFv35.Messages.EN.wm.cab for Compact Framework diagnostics

13.2.4 Preparing environments for former versions

This topic is for versions Porcitech 2011 or lower. Ignore it if you are using higher versions of Porcitech-.

QuickData for Pocket PC requires *.NET Compact Framework 2.0* and *Microsoft SQL Server 2005 Mobile 3.0 Edition* software to be installed in the Pocket PC. This topic is a guide to prepare your Pocket PC if it does not have this environment.

Note: Agritec recommends Windows Mobile 6.0 or higher as the operative system. If you have an older system, you can update your Pocket PC with this basic installation guide. **Agritec cannot offer support for the installation of the necessary software environment since it is an external product.** Please contact your Pocket PC representative for installation or problems.

Windows Mobile 6 or higher already includes *.NET Compact Framework 2.0* in ROM memory. Some devices with Microsoft Mobile 6.0 do not include Microsoft SQL Server, for example Psion Workabout Pro. In this case it is necessary to install it.

Installing .NET Compact Framework 2.0 Redistributable

Note: Windows Mobile 6.0 or higher includes this feature so it is not necessary to install it.

Click the following link and execute the installation program

<http://www.microsoft.com/downloads/details.aspx?FamilyID=9655156B-356B-4A2C-857C-E62F50AE9A55&displaylang=en>

Installing Microsoft SQL Server 2005 Mobile 3.0 Edition Device SDK

Note: Windows Mobile 6.0 or higher usually includes this feature so it is not necessary to install it.

Click the following link and execute the installation **SqlMobile30DeviceSdkENU.msi** program

<http://www.microsoft.com/downloads/details.aspx?FamilyID=5BD8ABAA-5813-4DB3-B23A-24551DE2ECC1&displaylang=en>

Next you must install SQL Server Mobile by manually copying the .cab files to the device. Copy the sqlce30.platform.processor.cab file to your device from the following directory:

C:\Program Files\Microsoft SQL Server 2005 Mobile Edition\Device\Mobile\v3.0
\<platform>\<processor>\

For example, if you have a Pocket PC 2003 device, you must copy:

C:\Program Files\Microsoft SQL Server 2005 Mobile Edition\Device\Mobile\v3.0\wce400\armv4\sqlce30.ppc.wce4.armv4.cab

Another example, if you have the Psion Workabout Pro, it uses Windows CE 2005. In this case, you must copy:

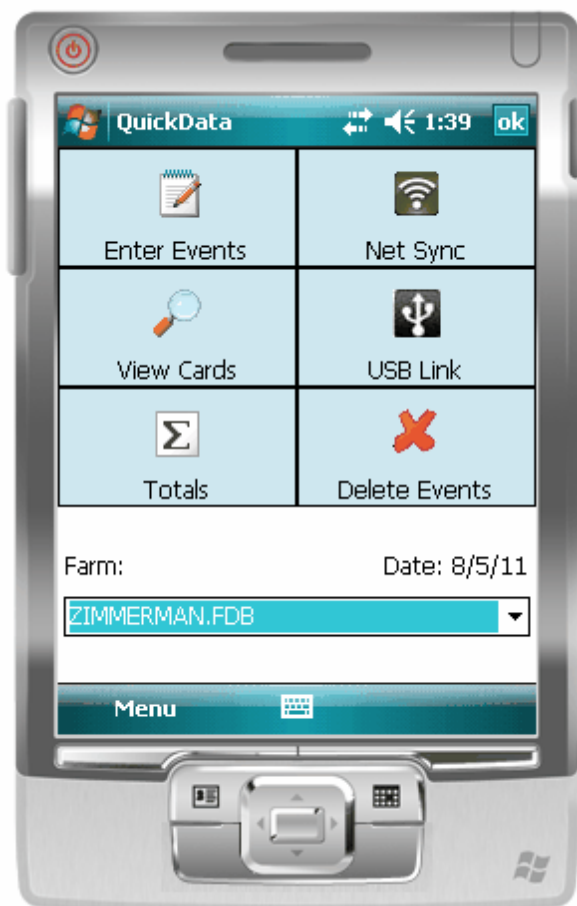
C:\Program Files\Microsoft SQL Server 2005 Mobile Edition\Device\Mobile\v3.0\wce500\armv4i\sqlce30.ppc.wce5.armv4i.cab

Finally, in the device, click **Start, Programs** and **File Explorer**. Execute the file that you have copied in the above steps.

To check that it is installed, on the device click **Start, Settings, System, Remove Programs** and you will be able to see **Microsoft SQL Mobile 2005**.

13.2.5 Main menu in a Pocket PC

The main menu shows several options:



Enter Events

Click here to enter any event in the QuickData database.

Net Sync

Synchronize the device database with a remote server using the network, via Ethernet or Wifi. This option requires the installation of QuickData Server, an application available for Ultimate editions. Porcitech installation is not required in the farm. The server is synchronized using Internet, so it can be placed in any location. The data is synchronized in two ways, from the device to server, and from server to device.

This option updates the animal histories and recorded events. For updating the codifications or options, it is necessary to use the **USB Link** method.

USB Link

Click **USB Link** to establish the communication with the host computer. This option requires Porcitech to be installed in a PC and an USB cable connected to the device. The data can move from device to host computer (updating the host), or from host to device (updating the device).

View Cards

Show the animal history card. Enter the **ID** and click **Go**. You can configure which fields to display using **Result Sheet** in **Options** menu of Porcitech.

Totals

Show a summary of recorded data for checking purposes.

Delete Events

Delete events saved in the Pocket PC. **Delete All Events** deletes all recorded events. **Delete Sent Events** only deletes the events already sent to the server. This last option is only useful for **Net Sync**.

Farm

Select the default farm. QuickData can manage multiple farms.

Default Date

Enter the default date for the device.

Network Setup

Enter the user, password and server provided by Agritech Software if you are using the Net Sync option.

Ping to QuickData Server

It checks the communication between the device and the server for Net Sync option.

Preferences

Define the preferences.

Autofill: After entering an event, the form will reuse some entered field values.

Status Indicator

This area shows the status of the entered data.

- PD Number of events in the device pending to send to the server.
- ER Number of events in the device with errors. These events have been sent to the server and have been returned because of errors. You need to delete them or fix them. You can fix the animal card in the server.
- ST Number of events in the device that already have been sent to the server. They are maintained in the device for historic or tracking purposes. The deletion will not affect the results.

13.2.6 Data entry using Pocket PC

Click **Enter Events** in the main menu to enter events. The form shows the last event entered. Click **New** to add a new event. You can configure the event fields to be displayed in the Event fields in Options menu of Porcitech. The bottom bar provides controls for the navigation, insertion and deletion of records. QuickData shows shortcuts in the right area of the bottom bar to enter common events.

Event Status

This button shows the event status. It is useful when you browse between the records.

PEND: Event pending to be sent to the server.

ERR: Event with errors. The server returned an error. You can see the description of the error by clicking the button.

SENT: Event already sent to the server.

RFID

Starts the reader for electronic identification. It can be used in conjunction with the physical button of the device.

Vw

Show the animal card.

File

This menu bar contains more navigation options such as **First**, **Previous**, **Next**, **Last**, **Cancel Edit**, **Delete Record** and Duplicate Records.

Save

Save the modifications in the current event and prepare the form to enter the next event.

Event

Change the animal type (Females or Group/Lot) and the event type to enter new events. Before you can change the event, you must press **Save** button to save the current entered event.

<

Go to previous event.

>

Go to next event.

Direct Access Buttons

Some contextual buttons can appear in the right bottom area of the screen. These buttons are direct access to add new events related with the current event. For example, if you are entering pre-wean deaths, the direct access button will add a new weaning event.

Button codes:

DH: Prewean deaths

WN: Wean

FT: Foster

RG: Register Offspring:

BT: Birthing

See also:

Result sheet

Event fields

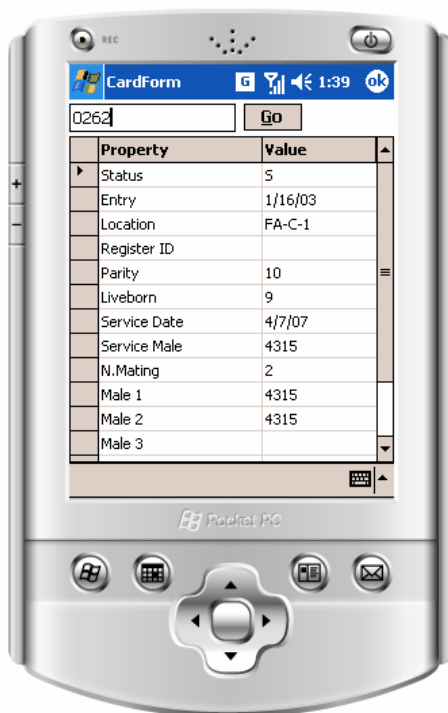
13.2.7 Duplicate Records

Copy the current event, creating multiple copies and increasing the ID. This option is useful for batch event entry of Arrival or Entry events if the ID's are consecutive.

Enter the **Number of Records** field and then press **Duplicate** button.

13.2.8 Viewing a card

To view an animal card, from the **Main Menu** click **View Cards** button, or from the **Enter Events** form click **View** button. You can configure the fields to display using **Result Sheet** in Options menu of Porcitech desktop application.



See also:

Result sheet

Event fields

13.2.9 Keyboard in Pocket PC

Agritec recommends the use of a physically integrated keyboard for Pocket PC, at least a numeric keyboard. However you can use the SIP (Soft Input Panel). Click the keyboard icon placed in the bottom right of the screen to show the SIP. To go to the next field, you can use the pen, or press Tab key, or press Enter key. When you are editing the last field of the form and you press Tab or Enter, the current record is saved and a new one of the same type is added to allow you to enter another event.

Problems:

If you press Tab and the cursor does not jump to the next control, please open options of SIP by clicking the arrow near the SIP icon, then click Options. Select **Word Completion** sheet and disable **Suggest words when entering text** and **Enable auto correct**.

13.3 Psion Workabout MX device

13.3.1 Psion Workabout device

Porcitech supports the old Psion Workabout device, however Agritec recommends that you use a new device since our development for Psion Workabout has been discontinued. The Psion Workabout model is now obsolete and it has been replaced by Psion Workabout PRO.

13.3.2 Install QuickData in a Psion Workabout

To communicate Porcitech with a Psion Workabout handheld, PsiWin software must be installed. This software is free of charge and it can be obtained from web sites, such as:

<http://www.cnet.com> (key word: PsiWin)
<http://www.paresa.es/Download.htm>
<http://psionteklogix.com>
<http://www.pSION.com>
<http://www.google.com> (key word: PsiWin)

Once PsiWin has been installed in the PC, QuickData software can be installed in the Psion Workabout following the steps below. Porcitech uses 57600 bauds by default in the communication between the PC and the Psion.

1. **Psion:** Connect the Psion by pressing On.
2. **Psion:** Close all the programs and go to the main menu (use the Menu key) The text "*PSION - Insert Startup (autoexec) SSD and press Enter or press Menu for System Interface*" will appear.
3. **Psion:** Press Menu and select Command processor.
4. **Psion:** Enter LINK /P1 /B57600 and press Enter
5. **Psion:** Connect the handheld to the PC, using the serial cable.
6. **Porcitech:** In File menu, select Options and click Handheld
7. **Porcitech:** Select the handheld where you wish to install QuickData.
8. **Porcitech:** QuickData can use A:, B: or M: unit as database. For default is M:. If you want to use another unit, for example A:, set **DBUNIT=A** in the **Parameters** field .

9. **Porcitech:** Click Install QuickData
10. **Psion:** Press Menu and select Exit, in Special menu.
11. **Psion:** Confirm exit, pressing Y key (yes)
12. **Psion:** Now, you are back in the main menu. Press Enter to activate QuickData

13.3.3 Data entry using Psion Workabout

In any instructions PS refers to the Psion button in the lower left corner of the handheld.

Common keys

MENU	Show the available options, according to the context.
ESC	Close the current form.
PS+X	Close the current form.
ENTER	Next field.
UP,DOWN	Navigation between fields.
LEFT,RIGHT	Navigation between registers.

Data entry using Psion Workabout

1. In the main screen of the handheld, select Date(D) and enter the date that will be assigned to following events. Serial date refers to the 1000 day date used on your farm. Press Enter to go back to the menu. Please check the date; it does not always refresh.
2. The main menu of QuickData, select Entry(E)
3. Select the work to be entered. You can use the arrows or simply enter the work code. After that, press Enter.
4. When in the Data Entry Mode, once an event is selected, it will display at the top, the event such as farrow with an (I) beside it, example, farrow(I).
5. A data entry form will appear. Enter the requested data. You can use the arrows to navigate between fields.
6. Press PS+U to save the event or just enter at the last entry.
7. Go back to step 3 if you want to continue entering events.
8. All Fosters must be entered on the handhelds- it does not calculate a net foster for you.
9. In the Removal Event, for Removal Type: 0=Death, 1=Cull
10. For Pregnancy Exam Results use: - or N for Negative, + or P for Positive, ? for Inconclusive and O for Observed Not Pregnant (Not in Pig).

Edit Mode

1. Press ESC. In this moment, the navigation mode is activated. You can navigate between entered events and modify any data. (Press Menu and select Record)
2. At the top, the event will be listed with a (B) beside the event name, for example, farrow(B).
3. The right and left arrows will navigate you through the events. To Edit an event, press PS+E and you can edit the event.

Keys in event forms

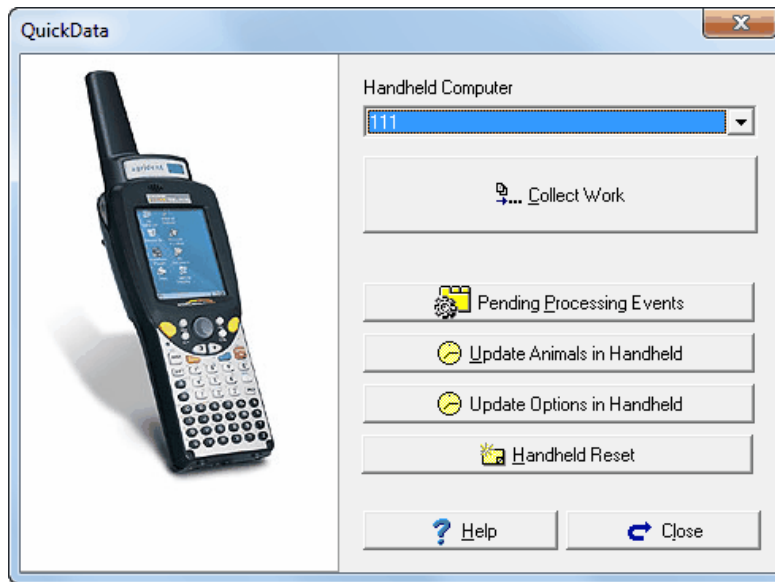
PS+A	Activate insert mode.
------	-----------------------

ESC	Activate navigation mode.
PS+V	View female card.
PS+E	Modify data event.
PS+M	Modify the date of a stored event.
PS+D	Enter default date. This date will be assigned to following events.
+	Repeat the last female Id. This is useful when recording prewean mortality after a birthing event or a wean event. It is also useful when entering more than one mating on the same female.
PS+R	Erase event.
PS+F	First event.
PS+P	Previous event.
PS+N	Next event.
PS+L	Last event.
PS+U	Update event.
PS+C	Cancel changes.
PS+X	Close form.
Arrows	Navigation between fields or events.

13.4 Handheld control panel

Porcitech provides a control panel to manage updates and synchronization with the devices.

1. Connect the handheld to the PC you want to communicate with.
2. In each handheld, select the **Link** (old Psion MX) or **USB Link** (Pocket PC) option to prepare communication.
3. In **Farm** menu, select **Handheld**
4. Select the connected handhelds on the displayed list.



The most important button is **Collect Work**. Other buttons are for a more detailed control of the operations, but usually are not necessary.

Collect Work

This process receives the data from the device, processes the events, and updates the animal histories in the device. Finally it asks you to clear the entered events in the device in order to avoid sending the same records in the next synchronization.

Pending Processing Events

Process all events placed in the Batch Data Entry.

Updates Animals in Handheld

This process updates the animal records and histories in the handheld from the Porcitech Desktop.

Update Options in Handheld

Updates options and codifications in the handheld from the Porcitech Desktop.

Handheld Reset

Delete all entered events in the handheld. It is necessary to delete the events in order to avoid sending the same records in the next synchronization.

13.5 Electronic identification

Porcitech offers an integrated electronic identification system also called EID. When the animal is scanned using the reader, it is automatically identified by means of a transponder (microchip) placed in the animal.

Each animal has two identifiers: the primary ID code, usually the visual ear tag used by Porcitech in

reports or files, and the EID used by the reader device.

First, it is necessary to collect the EID numbers of the animals, and manually assign the primary ID:

- 1.**In QuickData device, click **Enter Events**
- 2.**Click **New** and select **Change Field Value**
- 3.**Enter the primary ID using the device or keyboard
- 4.**Select **Electronic ID** in **Type**
- 5.**Put the reader device near of the tag and read it clicking the EID button of the screen or pressing the physical key (*). The box will fill with the EID number
- 6.**Click **Repeat** button and repeat the steps for each animal

(*) Some devices have a specific key to read the tag. For example, in Agrident Air reader, you can use the LEFT key.

Finally it is necessary to collect the **Change Field Value** events, see Data collection. You can see the EID values in the animal files in Current Status sheet. The EID numbers have been assigned to the animals and the system is ready to enter new events using the EID reader.

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14 Reports

14.1 Reports overview

Reports are the key part of Porcitech. Click **Reports** button in the tool bar, or click **Reports** in the main menu.

They are categorized as follows:

Management	Lists and History cards, used for task planning and management of females. Also called action lists.
Breeding Herd	Analysis and other reports pertaining to the entire breeding herd.
Services	Reports specific to service performance.
Farrowings	Reports specific to farrowing and weaning performance.
Herd	All farm reports, includes breeding and non-breeding animals.
Group/Lot	Reports specific to defined groups of animals, usually growing.
Feed and Financial	Feed and financial reports.
User	Custom or modified reports created by the user.

See also:

Defining report parameters
Report designers

14.2 Defining report parameters

Most reports use a similar report parameter form. It may include breakdowns, filters, sort order, and other options.

Breakdowns

The breakdown option is common to analysis reports. Selecting a breakdown defines the **columns** on your report. For example:

- Period breakdown: each column is a time period
- Parity breakdown: each column is a parity
- Genetics breakdown: each column is a genetic line

After choosing the breakdown, you can add a filter.

Filters

Filters extract a **subset** of data. For example:

- if you select period breakdown, then add a Parity=1 filter, your columns are periods but only Parity=1 females will be included in the report.
- if you select Parity breakdown, then add a Genetics=X filter, your columns will each be a parity, but

only GeneticsX females will be included in the report.

You can select more than one filter. For example, if you select Parity breakdown, then add a Genetics filter, you must also add a Period filter.

The form is divided into two panels. Select the filter option(s) in the left panel and then select the desired option in the right panel. The parameters for each filter option are combined using the AND operator. In other words, only records that match all defined options will be included in the result.

Filter Options

Filters | Order

Every filter has options. Select a filter from the filter column and select the desired filter options.

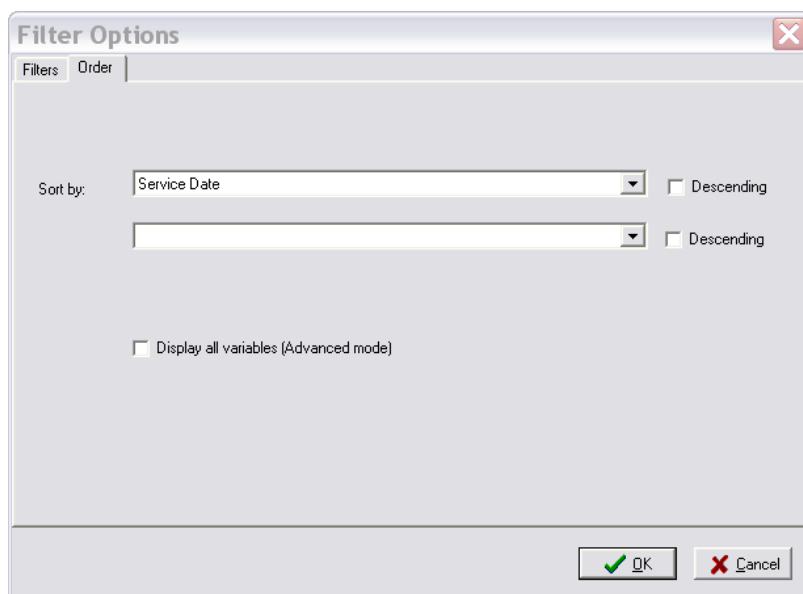
Select filter option	Filter options
Service date	<p>Service date</p> <p>Range: All Dates</p> <p>From: 15</p> <p>To: 15</p>
Number of service	
ID/Code	
Parity	
Register ID	
Current location	
Birthdate	
Entry date	
Removal date	
Sire	
Dam	
Text1	
Text2	
User filter	

OK Cancel

Order

This defines the sort order of the filtered records. Use the combo box to select the primary order variable, and if desired, the secondary order variable. The **Descending** checkbox forces the order in a descending mode instead of ascending (default)

Display All Variables appears in some reports. Check on this option to add all possible variables in the **Sort By** boxes if you do not see the one you want.



The image shows a 'Filter Options' dialog box with a close button (X) in the top right corner. It has two tabs: 'Filters' and 'Order'. The 'Filters' tab is selected. Inside the dialog, there is a 'Sort by:' label followed by a dropdown menu currently showing 'Service Date'. To the right of this dropdown is a checkbox labeled 'Descending'. Below this, there is another empty dropdown menu, also followed by a 'Descending' checkbox. At the bottom of the dialog, there is a checkbox labeled 'Display all variables (Advanced mode)'. At the very bottom right, there are two buttons: 'OK' with a green checkmark icon and 'Cancel' with a red X icon.

14.3 Management reports

Management reports are used to create a list of tasks to do in the farm, for example, females to serve, pregnancy check, vaccinate, etc. Most of the management reports share the same parameter form.

Period Length

Select the number of days from the current date to include females due for tasks.

Date to Exclude Overdue Females

Leave it blank to include overdue females, or enter a date to exclude them before the date.

Days From Status

Days from the status to calculate the task date. For example, in a Females Due to Farrow list, the status is Served and the task date is Due date.

Data Transfer to Batch

Select Yes to transfer the list of females to Batch Data Entry.

You can add additional filters for Parity, Genetics, Location, and Group ID. You can change the sort order in the **Order** sheet.

To modify a management report

If you want to add new variables or remove others from the lists:

1. Click the **Design** button.
2. Click **Columns** sheet.
3. Check or uncheck the variables you want on your list. You can change the title of the column by

typing in the **Column Title** box.

4. Click **Preview** to check the result.
5. Click **Save**. All modified reports are saved to your **User** folder. You cannot overwrite a standard report.

If you need more complex modification, such as rearranging columns or adding variables not available in the list, click the **Convert and Save** button in the Columns sheet. The report will be saved to your User folder. Go to the User folder, select the report, and click Design button. This will open the report directly in the **Report Designer**.

By default, management reports do not include boxes or forms to collect data. To add boxes in the management reports you will need to customize them:

1. Select the report and click **Design** button
2. Click **Columns** sheet
3. Uncheck some columns to create space
4. Check **Box1**
5. Enter the column title in **Column Title**
6. Check more boxes if you need more
7. Click **Preview** button to check the result
8. Click **Save** button to save the report in the **User** folder

14.4 Basic customization

Porcitech includes powerful report designers to create any report. They are necessary for advanced customized reports but they can take some time to learn. In most cases, you can get the desired results using basic customization that does not require additional knowledge.

Most of the reports include the Filter options form where you can define the filters and sort order. Once you have the desired result, you can save your customized report by clicking the **Save** button in the Preview Window. The report is saved in the **User** folder.

Example:

Create a list of served females in the herd:

1. Go to **Reports**, click **Breeding Lists** sheet and double click **Current Status Females** report.
2. Select **Current Status** in the left panel of filters.
3. Select **Served** in **Status**, leave **All Dates** in Range.
4. Click **Ok** to see the result.
5. Click **Save Report** to save the customized report.
6. Enter a name for the report, for example **Served Females**.

Close the report and click **User** sheet. Double click the **Served Females** report that you have created to see a list of served females. Use multiple filters for more complex criteria. Simply click **Filtering**

button of the **Preview** window to redefine the filter.

See the following topics for more examples.

See Report Designers for advanced reports.

14.5 Introduction to user-defined filters

14.5.1 Defining ranges

Ranges are a powerful Porcitech feature used in filtering reports. They allow you to define one or more groups of records. The ranges are separated by spaces. For example, to select a group of female Ids for a report, you can enter *102 30 H34* in the Id code range box. The above selection is very simple, it includes the females with Id 102, 30 and H34.

Intervals

The colon ':' allows you to specify the minimum and maximum of a range such as MIN:MAX. For example, continuing with the previous example, *102:110* includes all females with an Id between and including 102 to 110.

To indicate a lower or upper limit, you can leave blank the minimum or maximum. For example

102: includes all females with an ID 102 or higher.

:110 includes all females with an ID 110 or lower.

Keep in mind that Porcitech orders the records in an alphanumeric way. This means it sorts using both numbers and letters. The range *102:110* includes 102, 103, 104, ... 110 but also 102A, 108533, 105RN/4, etc. It is important to understand this when defining a range that may include both letters and numbers. Numbers are always sorted by priority over letters.

Unitary sequence

When the variable is a number only, you can use the '..' operator. This indicates an incremental sequence. For example, to select a group of females by parity, entering *1..5* in the range box is exactly the same as *1 2 3 4 5*.

Integer sequence

Using the .. operator to define a sequence, the interval can be defined between parenthesis. For example *0..10(2)* means from 0 to 10 in interval of 2. It is the same as entering *0 2 4 6 8 10*.

Decimal sequence

Using the .. operator to define a sequence, the decimal interval can be defined between parenthesis. For example *0..1(0.2)* means from 0 to 1 in interval of 0.2. It is the same than entering *0.0 0.2 0.4 0.6 0.8 0.10*

All operators can be mixed. Some examples:

In All Females report, I want to include only females of parity 1, 2 and 3:

Parity box: *1:3*

In All Females report, I want to include females with Id from H100 to H200 and also H205, Z450 and from N102 to N110:

Id box: *H100:H200 H205 Z450 N102:N110*

In the Multifarm report I want to create 3 groups of farms. The first group includes the farm Ids 101, 102 and 103. The second group includes farm 110 and the third group includes farms 115, 116, 117 and 118. I want to see 3 columns, one column for each group to see the consolidated results:

Farm box: *101:103 110 115:118*

In the Parity Histogram report, I want to see 5 parity groups: 1) 0, 1, 2, separately and 2) parities 3 to 6 combined and 3) including parity 7 and higher:

Parity box: *0..2 3:6 7:*

In All Females report, I want to exclude females of parity 3, 4 and 5:

Parity box: *:2 6:*

14.5.2 Introduction to filters

Filters are used in most of the reports (User Filters) and report designers. The following operators can be used:

Operator	Description
=	Equal
<>	Not equal
>	Greater than
<	Less than
>=	Greater than or equal
<=	Less than or equal
BETWEEN	Between an inclusive range
LIKE	Search for a pattern
CONTAINING	Test if a text value is contained in another text value

Using filters

To select only the persons living in the city "Sandnes":

`City='Sandnes'`

"Customers" table

LastName	FirstName	Address	City	Year
----------	-----------	---------	------	------

Hansen	Ola	Timoteivn 10	Sandnes	1951
Svendson	Tove	Borgvn 23	Sandnes	1978
Svendson	Stale	Kaivn 18	Sandnes	1980
Pettersen	Kari	Storgt 20	Stavanger	1960

Result

LastName	FirstName	Address	City	Year
Hansen	Ola	Timoteivn 10	Sandnes	1951
Svendson	Tove	Borgvn 23	Sandnes	1978
Svendson	Stale	Kaivn 18	Sandnes	1980

Using Quotes

Note that we have used single quotes around the conditional values in the examples.

Filters use single quotes around text values. Numeric values should not be enclosed in quotes.

For text values:

```
This is correct:  
FirstName='Tove'
```

```
This is wrong:  
FirstName=Tove
```

For numeric values:

```
This is correct:  
Year>1965
```

```
This is wrong:  
Year>'1965'
```

The LIKE Condition

The LIKE condition is used to specify a search for a pattern in a column.

Syntax:

```
column LIKE pattern
```

A "%" sign can be used to define wildcards (missing letters in the pattern) both before and after the pattern.

Using LIKE

The following filter will return persons with first names that start with an 'O':

```
FirstName LIKE 'O%'
```

The following filter will return persons with first names that end with an 'a':

```
FirstName LIKE '%a'
```

The following filter will return persons with first names that contain the pattern 'la':

```
FirstName LIKE '%la%'
```

14.5.3 AND & OR

AND and OR join two or more conditions in a WHERE clause. The AND operator displays a row if ALL conditions listed are true. The OR operator displays a row if ANY of the conditions listed are true.

Original Table (used in the examples)

LastName	FirstName	Address	City	Year
Hansen	Ola	Timoteivn 10	Sandnes	1951
Svendson	Tove	Borgvn 23	Sandnes	1978
Svendson	Stale	Kaivn 18	Sandnes	1980
Pettersen	Kari	Storgt 20	Stavanger	1960

Example

Use AND to display each person with the first name equal to "Tove", and the last name equal to "Svendson":

```
FirstName='Tove' AND LastName='Svendson'
```

Result:

LastName	FirstName	Address	City
Svendson	Tove	Borgvn 23	Sandnes

Example

Use OR to display each person with the first name equal to "Tove", or the last name equal to "Svendson":

```
FirstName='Tove' OR LastName='Svendson'
```

Result:

LastName	FirstName	Address	City
Svendson	Tove	Borgvn 23	Sandnes

Svendson	Stale	Kaivn 18	Sandnes
----------	-------	----------	---------

Example

You can also combine AND and OR (use parentheses to form complex expressions):

```
(FirstName='Tove' OR FirstName='Stephen') AND LastName='Svendson'
```

Result:

LastName	FirstName	Address	City
Svendson	Tove	Borgvn 23	Sandnes

14.5.4 BETWEEN ... AND

The BETWEEN ... AND operator selects a range of data between two values. These values can be numbers, text, or dates.

```
column_name BETWEEN value1 AND value2
```

Original Table (used in the examples)

LastName	FirstName	Address	City
Hansen	Ola	Timoteivn 10	Sandnes
Nordmann	Anna	Neset 18	Sandnes
Pettersen	Kari	Storgt 20	Stavanger
Svendson	Tove	Borgvn 23	Sandnes

Example 1

To display the persons alphabetically between "Hansen" and "Pettersen", use the following filter:

```
LastName BETWEEN 'Hansen' AND 'Pettersen'
```

Result:

LastName	FirstName	Address	City
Hansen	Ola	Timoteivn 10	Sandnes
Nordmann	Anna	Neset 18	Sandnes
Pettersen	Kari	Storgt 20	Stavanger

Example 2

To display the persons outside the range used in the previous example, use the NOT operator:

```
LastName NOT BETWEEN 'Hansen' AND 'Pettersen'
```

Result:

LastName	FirstName	Address	City
Svendson	Tove	Borgvn 23	Sandnes

14.5.5 Date format in filters

- Porcitech will accept the following date formats in filters:
- 'dd MMM yy'
- 'mm/dd/yyyy'
- 'mm-dd-yyyy'
- 'dd.mm.yyyy'
- 'yyyy.mm.dd'

Dates must always be in single quotes. Porcitech also accepts CURRENT_DATE. You can specify tomorrow as CURRENT_DATE + 1.

Examples of dates:

'24 JAN 05'

'1/24/05'

'2005-1-24'

In the Help manual examples, we use 'dd MMM yy' or 'yyyy-mm-dd' to avoid any confusion by the ordering of day or month between different countries.

14.6 Explanation of some predefined reports

14.6.1 Performance analysis

This is a statistical analysis report for monitoring overall breeding herd performance. Breakdowns that can be selected include time period, parity, genetics, and user-defined fields. In addition, filters can be added to any breakdown.

All variables used are defined in Performance table, see Agritec Variable Dictionary chapter.

Each section in the Performance Analysis, i.e. Service, Farrowing, and Weaning, is a different cohort of females. A cohort is a group of animals that share a common event.

- In the Service section, all females share a service event in the time period.
- In the Farrowing section, all females share a farrowing event in the time period.
- In the Weaning section, all females share a wean event in the time period.

For example:

% of Served bred by 7 days, are females who had a service event in the time period that occurred within 7 days of weaning.

% of Weaned bred by 7 days, are females with a wean event in the time period and a service that occurred within 7 days after their wean event. Of course if you run a weekly report, you must ignore the last week because 7 days have not elapsed from this time period. This value is helpful for monitoring seasonal infertility, such as hot summer months when less females may return to heat after weaning.

SERVICE PERFORMANCE

Total services

Expression: Services

Number 1st services

Expression: Services-RepeatServices

Number repeat services

Expression: RepeatServices

Percent repeat services

Expression: RepeatServices / Services * 100

Number multiple matings

Expression: MultipleMatings

Percent multiple matings

Expression: MultipleMatings / Services * 100

Matings per service

Expression: ServMatings / Services

Number AI services

Expression: ServicesAI

% AI services

Expression: $\text{Percent}(\text{ServicesAI} / \text{Services})$

Number natural services

Expression: ServicesNatural

% natural services

Expression: $\text{Percent}(\text{ServicesNatural} / \text{Services})$

Number of mixed services

Expression: $\text{Services} - \text{ServicesAI} - \text{ServicesNatural}$

% mixed services

Expression: $\text{Percent}(\text{Services} - \text{ServicesAI} - \text{ServicesNatural} / \text{Services})$

Number homospermic services

Expression: $\text{HomospermicServices}$

% homospermic services

Expression: $\text{Percent}(\text{HomospermicServices} / \text{Services})$

Age at entry

Expression: $\text{Divz}(\text{EntryAgeInt}, \text{EntryAgeCount})$

Age at first service

Expression: $\text{Divz}(\text{BirthFstServiceInt}, \text{P0CountAgeFstService})$

Served 1st service after entry

Expression: P0FstServ

Entry to 1st service interval

Expression: $\text{EntryFstServiceDays} / \text{P0FstServ}$

Served 1st service after weaning

Expression: CountWeanFstServ

Weaning-1st service interval

Expression: $\text{WeanFstServ} / \text{CountWeanFstServ}$

Percent of served bred by 7 days

Expression: $\text{Percent}(\text{Services7FromWean}, \text{CountWeanFstServ})$

Farrowing rate (service cohort)

Expression: $\text{Percent}(\text{ServBirthings}, \text{Services} - \text{ServUnknownResult})$

FARROWING PERFORMANCE

Farrowings

Expression: Birthings

Percent litters less than 7 born alive

Expression: $\text{Percent}(\text{Birthings6}, \text{Birthings})$

Avg parity farrowed

Expression: $\text{SumBirthParity} / \text{Birthings}$

Total born per farrow

Expression: $\text{Born} / \text{Birthings}$

Liveborn per farrow

Expression: $\text{Liveborn} / \text{Birthings}$

Stillborn per farrow

Expression: Stillborn / Birthings

% Stillborn

Expression: Stillborn / Born * 100

Mummies per farrow

Expression: Mummies / Birthings

% Mummies

Expression: Mummies / Born * 100

Farrowing rate

Expression: Birthings / ServicesPeriodBirth * 100

Adjusted farrowing rate

Expression: Percent(Birthings, ServicesPeriodBirthAdj)

Avg gestation length

Expression: SumGestationLen / CountGestationLen

Birthweight / liveborn

Expression: SumBirthWeight / CountBirthWeight

Farrowing interval

Expression: SumBirthInt / CountBirthInt

Abortions

Expression: Abortions

Preweaning mortality rate (cohort)

Expression: Percent(BtLivebornWeaned-BirthTotalWeaned,BtLivebornWeaned)

Females farrowed and weaned

Expression: BtFemalesWeaned

Litters / mated female / year

Expression: GestationDays * 365 / 115 / MatedFemaleDays

Litters / female / year

Expression: GestationDays * 365 / 115 / FemaleDays

Total born / mated female / year

Expression: Born * 365 / MatedFemaleDays

WEANING PERFORMANCE

Total pigs from Wean events

Expression: TotalWeaned

Litters weaned

Expression: LittersWeaned

Pigs weaned in period

Expression: NWeaned

Pigs weaned per litter

Expression: TotalWeaned / LittersWeaned

Females weaned or nursed off
Expression: FemalesWeaned

Pigs weaned per female
Expression: LastWeaned / FemalesWeaned

Percent of weaned bred by 7 days
Expression: Percent(Weanings7Service, FemalesWeaned)

Net fostered
Expression: NetFostered

Average weaning age
Expression: SumWeanLitterAges / CountWeanLitterAges

Avg weight/weaned pig
Expression: SumWeanWeight / CountWeanWeight

Recorded preweaned deaths
Expression: RecordedPWDeaths

Preweaning mortality rate (period)
Expression: (LiveBornLitWeaned+NetFostered-TotalWeaned) / (LiveBornLitWeaned+NetFostered) * 100

Weaned / mated female / year
Expression: TotalWeaned * 365 / MatedFemaleDays

Weaned / female / year
Expression: TotalWeaned * 365 / FemaleDays

POPULATION

Ending total female inventory
Expression: EndingFemaleInventory

Avg total female inventory
Expression: FemaleDays / PeriodDays

Ending unmated female inventory
Expression: EndingUnmatedFemaleInventory

Ending mated female inventory
Expression: EndingFemaleInventory-EndingUnmatedFemaleInventory

Avg unmated female inventory
Expression: UnmatedFemaleDays / PeriodDays

Avg mated female inventory
Expression: MatedFemaleDays / PeriodDays

Ending male inventory
Expression: EndingMaleInventory

Average parity
Expression: EndingFemaleParity / EndingFemaleInventory

Females entered
Expression: Entered

Replacement rate
Expression: Entered * 365 / FemaleDays * 100

Females culled
Expression: Culled

Culling rate
Expression: $\text{Culled} * 365 / \text{FemaleDays} * 100$

Avg parity of culled females
Expression: $\text{SumParityCulled} / \text{Culled}$

Female deaths
Expression: Deaths

Death rate
Expression: $\text{Deaths} * 365 / \text{FemaleDays}$

Avg nonproductive days / female / year
Expression: $\text{NonProductiveDays} * 365 / \text{FemaleDays}$

14.6.2 group reports

It is important to understand how group reports work. The report you select to monitor feed usage, inventory, and growth performance for group/lots should be determined by the way you have defined your animal groups in the Group/Lot file.

Make sure you verify that the **Type** field in the **Current Status** sheet of the **Group/Lot** file is selected, based on the usual pig flow type for that group/lot. It is also important to select a **Stage** so you can use it as a filter in reports. Please see

Growth performance by period – Dynamic (Continuous Flow)

This is a statistical report which shows population and growth performance trends over one or more periods of time. Each column is a time period.

This report is used for dynamic (continuous flow) groups. Calculations are based using the beginning and ending inventory of time periods. For this reason, *it is important to enter an **Inventory event** that includes the measured or estimated total weights to coincide with the ending date of your desired report periods.*

Growth performance by period – Static (All in/All out)

This is a statistical report which shows population and growth performance trends for **groups of animals that share a common event** (such as a first in or last out date) over one or more periods of time. Each column is a time period. Calculations are based on events *as they occur in the time period.*

Growth performance by Cohort (All in/All out)

The appearance of this report is similar to the above Growth performance - Static report, however the calculation method is different. In this report the calculations are based on one common event that is shared by a cohort in a time period.

For example the cohort analysis may follow all animals in the group until the last had been marketed. In this case the **End Group/Lot** event is the shared event in the time period. Groups are selected for analysis in this report only if they share a **End Group/Lot** date in the time period. *Calculations are based from the beginning date to ending date of each cohort, regardless of when events actually occur.* The only event that is true to the time period is the ending, or "close-out", date.

Example:

Supposing that the database only has 2 growing events

1 JAN: Move in 100 animals

1 FEB: Marketed 95 animals and close the Growing Id

Then, the report would display:

	By Cohort	By Period
Data displayed in period = January	Move in = 0 Marketed = 0	Move in = 100 Marketed = 0
Data displayed in period = February	Move in = 100 Marketed = 95	Move in = 0 Marketed = 95

Closeout - Key performance indicators

The data displayed is exactly the same as the **Growth performance by cohort** report but in another format. You can customize this report adding columns or summaries.

14.6.3 Total planning

The Total Planning report is a "snapshot" of the current status of all females today on the farm. It shows the status of each female in the herd and the number of days from her status-changing event.

There are 3 blocks from left to right: services, farrowings and weanings. Each block contains several columns. Each column is a week and it displays the sow Ids from bottom to top. For example, the second column of the services block displays the served sow ids from 1 and 2 weeks (7 to 13 days ago).

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



15 Report designers

15.1 Report designers

Porcitech incorporates a complete and powerful **Report Designer** which allows you to create any type of list or custom analysis report, extracting the information directly from the database. The final objective of these reports is to help in the decision-making process.

Porcitech gives you total freedom of access, similar to Microsoft Access, by using wizards or SQL, an international standard database language. With the Report Designer you will be able to select any data variables and create columns, add labels, and perform mathematical calculations using expressions and filters.

Some examples:

- What is the real impact if I use artificial rather than natural insemination?
- Which animals should be eliminated due to low production?
- Which breeding technician produces the best results?
- Which feed facilitates optimal performance?

The number and type of queries is limitless.

By default Porcitech includes a number of pre-defined reports. You can modify them, or create completely new reports.

Use the existing **Report menu** to select the type of report you want to modify or create.

Open

Displays an existing report on the screen. In most reports a parameter dialog will appear. You can generate a report ordered by parameters you determine, and specify a filter to select a subset of the population. If you routinely use the same report parameters, such as breakdowns or filters or report periods, you can **Save** the report using a different name to quickly generate the report the next time you want to run it. The report will be saved in the **User** folder with the new name.

Design

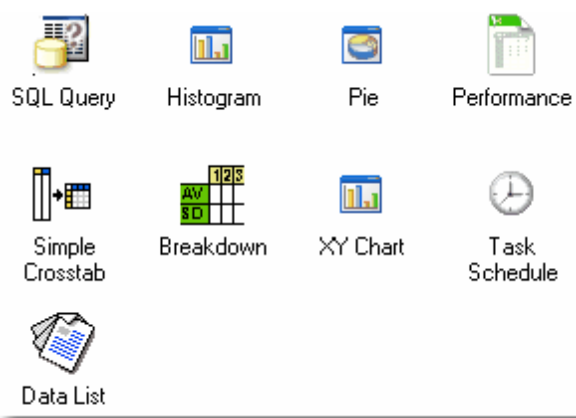
You can modify a pre-existing report and save it under a different name. All modified reports are saved in the **User folder** so the original report cannot be over-written.

New

Create a completely new database report using tools such as Breakdown, Query, Histogram, List Data, etc. All created reports are saved into the User folder by default.

Types of New reports:

Basic data list:	Report organized in columns.
Task schedule:	Report for management purposes.
Histogram:	Shows the distribution of a selected variable in a bar chart.
Pie:	Shows the distribution of a selected variable in a pie chart.
Breakdown:	Analyzes one or more variables in relation to another variable used as a category breakdown.
XY Chart:	Graphical representation of a breakdown.
Cross tab:	Tabulates the results of one variable against the other.
Performance:	Statistical trend reports for a set of herd variables.
SQL Query:	Extracts information from the database.
Data list:	Advanced version of Query designer. You can arrange columns, fonts, page footers, ...

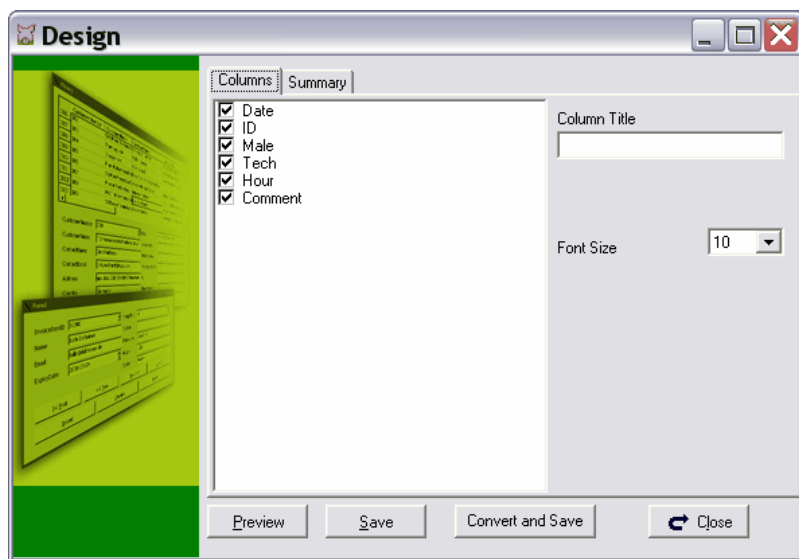


15.2 Basic Data List report designer

Some predefined reports are created using a basic data list report designer. This report designer is not available to create new reports. It only allows you to customize the predefined ones.

These reports are basically lists of data organized in columns. You can hide, show or define the title for each column. You can also define the font size of the entire report.

If you prefer to completely redesign the report using the more flexible features in the advanced report designer, click **Convert and Save** button. The **Convert and Save** button creates a new report for the more advanced Data List Report Designer and saves it to the User folder. Then go to the User folder, select the new report and click **Design** button to open the advanced designer.



15.3 Task Schedule report designer

The **Task Schedule** is a report designer for management purposes. For example, it may be used to create a management report for vaccinations.

Options sheet

Filtering

Select a filter to include females according to their status or last event.

Days

Enter the number of days from the above filter. For example, if Status=Entered, **days** will be the number of days from the Entry event.

Title

This assistant allows up to 3 filters. The title indicates the raised filter for each row in the report.

Global Filtering

Additional filter, you can use the variable names of FemaleEx table.

Model

Select the basis model of the report. Then you can customize it enabling or disabling some columns.

See Basic Data List report designer to customize columns.

See also:

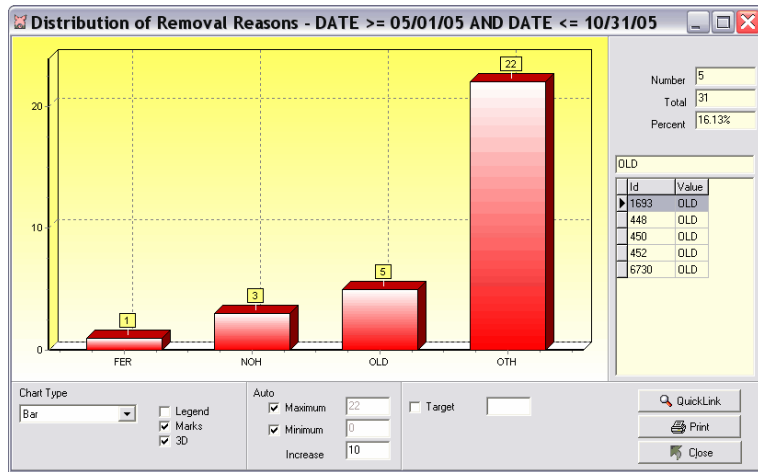
Management reports

Management list: Vaccinations

15.4 Histogram report designer

15.4.1 Histogram report designer

A histogram is a graph that counts the number of occurrences of data points in a series of ranges or bins. It shows the distribution of a determined variable. The histogram designer allows us to specify this variable and other optional parameters for the definition of the graphic.



Creating a histogram

1. Click **Reports**
2. Click **New**
3. Double click **Histogram**

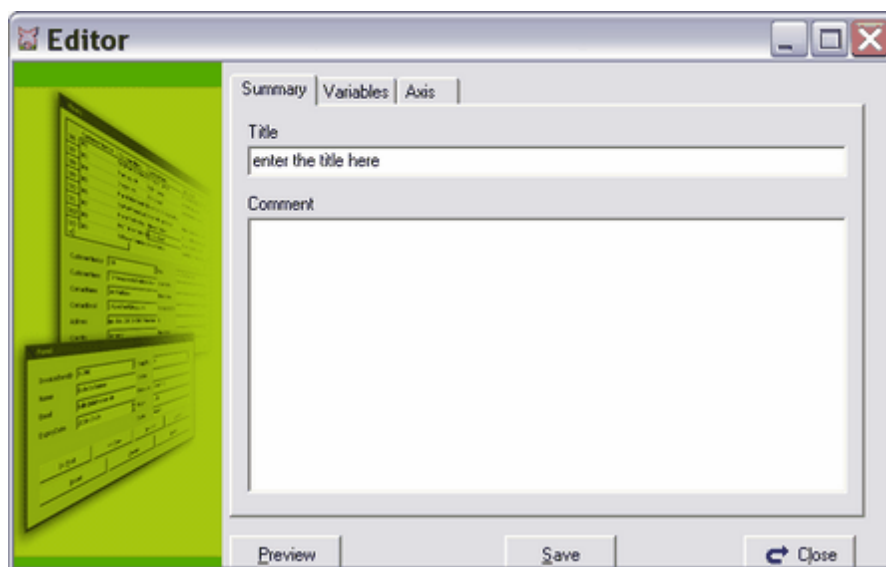
Summary sheet

Title

Title of the histogram that will appear on the top.

Comment

Text showing the dialog of the report selection.



Variables sheet

Table

Name of the table used.

Variable

Variable, or mathematical expression of the function to be analyzed.

X Label

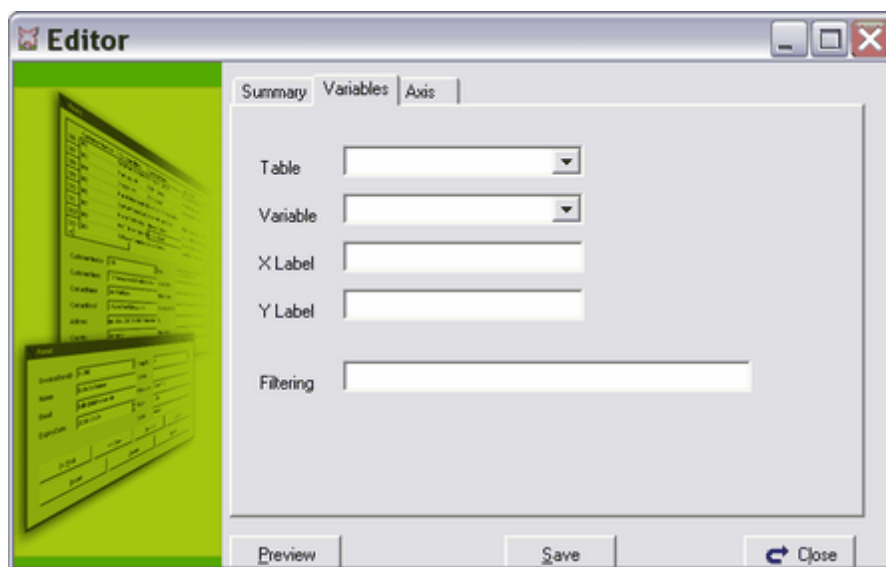
Text associated with the horizontal axis.

Y Label

Text associated with the vertical axis.

Filtering

Allows a search filter style SQL to be specified to limit the analyzed animals. Example: isactive=1 and services>3.



Axis sheet

There are 3 ways to define the ranges or bins: Automatic, Uniform and Free.

1. Automatic Scale

Porcitech automatically creates ranges according to the data.

2. Uniform Scale

When the X variable is numerical, then you can define the ranges of a uniform scale defined by minimum and maximum values.

Mask

Mask of the horizontal axis if it is numerical. Examples: ##0.0 ### 0.000.

Minimum

Minimum value of the horizontal axis.

Maximum

Maximum value of the horizontal axis.

Increase

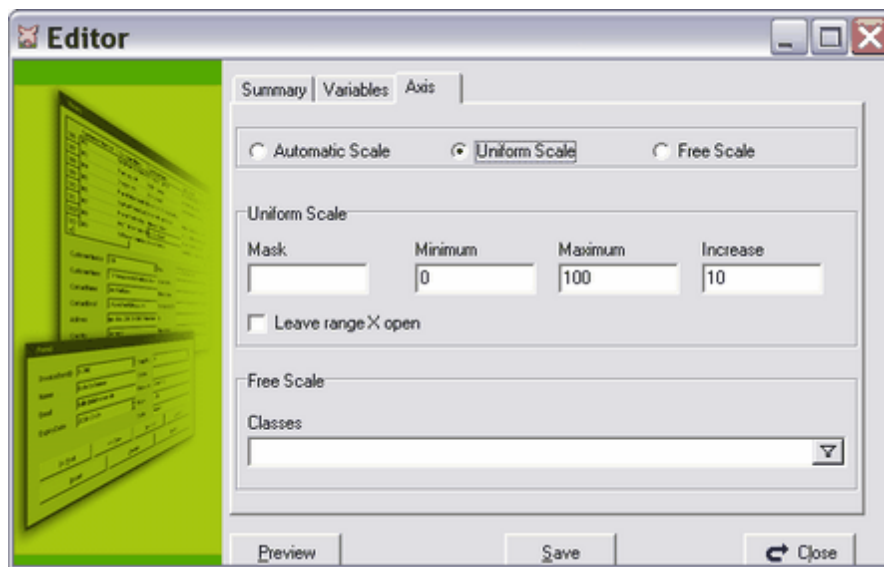
Increase, or the step, between columns of the horizontal axis.

Leave Range X Open

You may include, or exclude, any data found outside the analyzed range of the histogram.

3. Free Scale

Sometimes it is necessary to define each class or range. For example "0:10 11:50" defines 2 classes, from 0 to 10 and from 11 to 50.

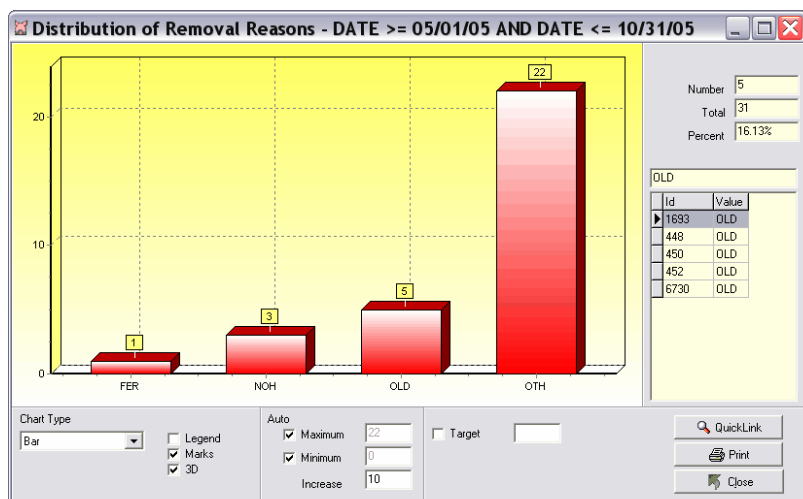
**See also:**

Database consults

Treatments within 30 days after farrowing

15.4.2 View a histogram

To see the results of a report, click **Preview** button, in the designer screen, or click Reports in main the menu, and then double click the report that you want to open.



The above histogram shows the distribution of removal reasons between 2 dates.

- Click a column to obtain detailed information about the animals.
- Click QuickLink button to open the selected animal card in the grid located in the right side.
- To zoom in on the area: Keep the left button of the mouse pressed down and select the desired area.

Number

Number of individuals belonging to the selected column.

Total

Count total all the analyzed values.

Percent

Percentage of the number of individuals belonging to the selected column over the total of analyzed individuals.

Range

Range of values of the selected column. '[' indicates that the value shown is included in the column, '(' is excluded.

15.4.3 How to create a histogram report step by step

In this step by step, we will show how to create a treatment histogram. See Treatments within 30 days after farrowing chapter.

The user question was:

I want to know the number and percentage of all treatments applied to females within 30 days after farrowing. Only include year 2004.

Instructions to create the above report:

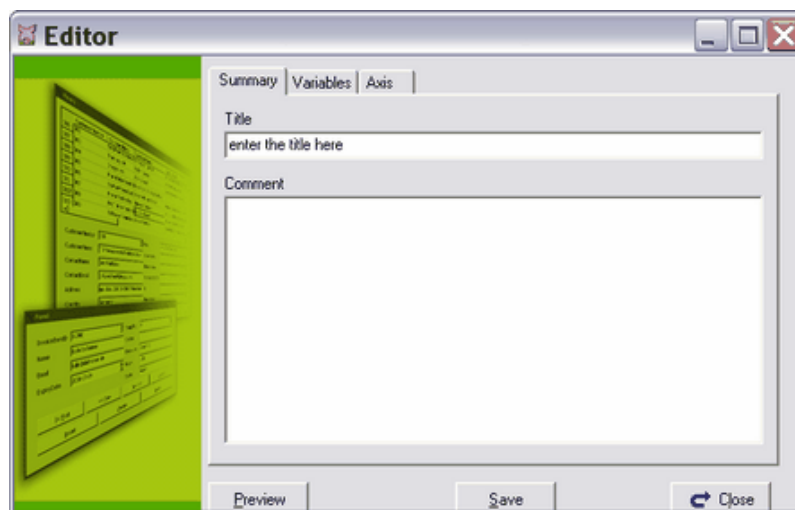
1. Click **Reports**
2. Click **New**
3. Double click **Histogram**
4. Enter fields in **Summary** sheet:

Title

Title of the histogram that will appear on the top.

Description

Text showing the dialog of the report selection.



5. Click **Variables** sheet and fill in the following fields:

Table

Name of the table used. In this case, I want to analyze treatments, the table will be TREATMENTEX. See Agritec Variable Dictionary.

Variable

Variable, or mathematical expression of the function to be analyzed. TREATNAME is the treatment identification.

X Label

Text associated with the horizontal axis. It is optional.

Y Label

Text associated with the vertical axis. It is optional.

Filtering

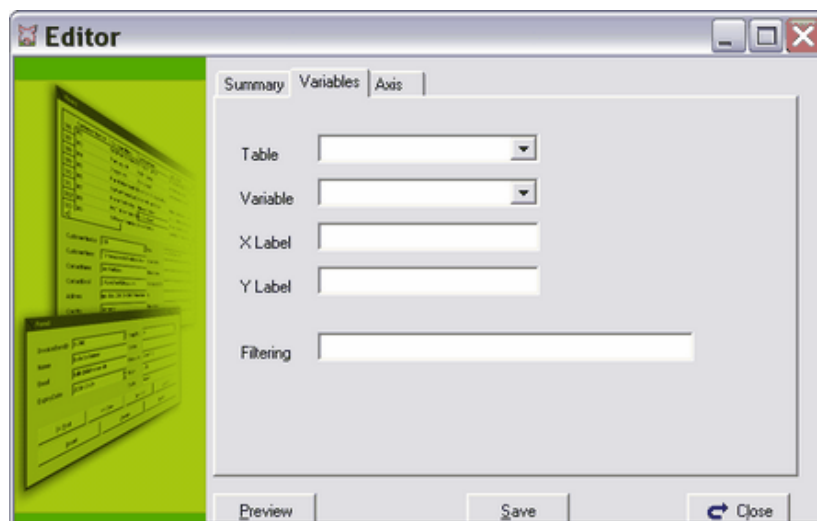
Allows a search filter style SQL to be specified to limit the analyzed animals. The user has 2 conditions:

A-Treatments within 30 days after farrowing

B-Only farrowings within year 2004

Enter in filtering: TREATDATE-BIRTHINGDATE BETWEEN 0 AND 30 AND BIRTHINGDATE

BETWEEN '1 JAN 2004' AND '31 DEC 2004'

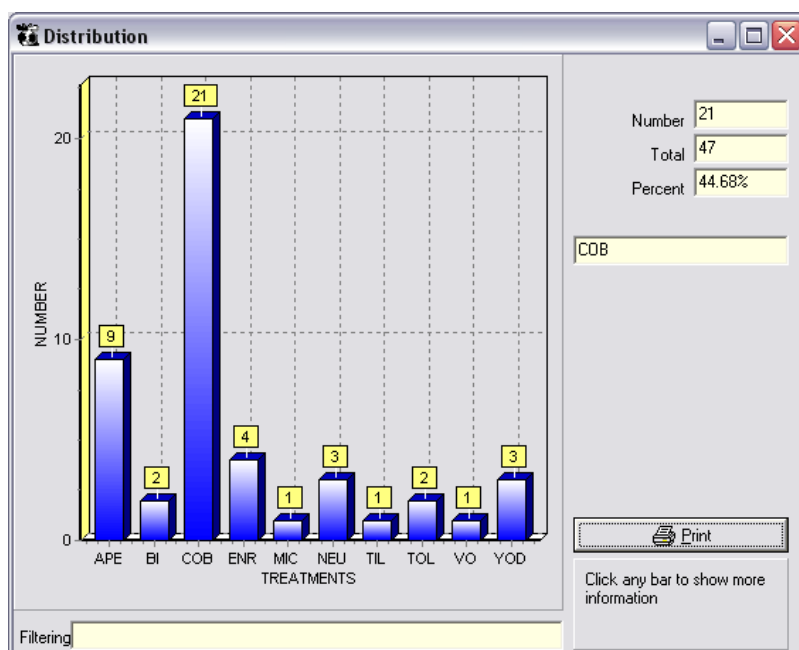


6. Click **Axis** sheet. There are 3 ways to define the ranges or bins: Automatic, Uniform and Free. Select Automatic Scale. Porcitech automatically creates bins according to the data.

7. Click **Preview** button to see the chart.

8. Click **Save** button to save the report.

The Histogram report is shown below:

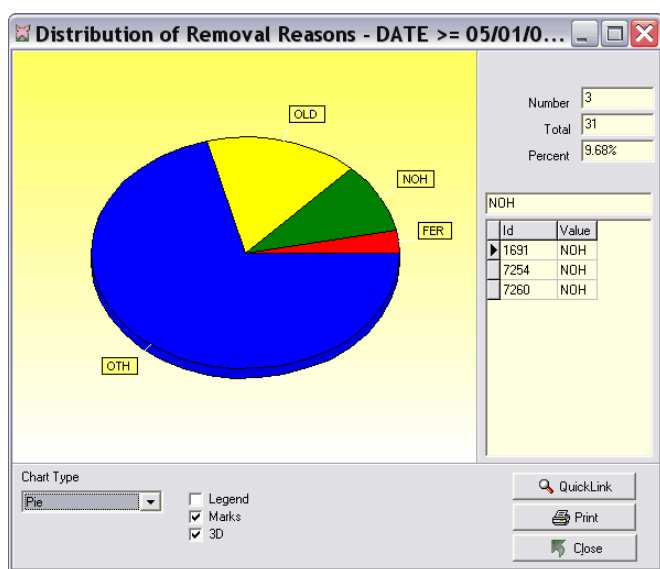


15.5 Pie report designer

15.5.1 Pie report designer

A pie chart is a circular chart divided into segments, illustrating relative magnitudes or frequencies. In a pie chart, the arc length (and consequently, the central angle and the area) of each segment, is proportional to the quantity it represents. Together, the wedges create a full disk.

The pie designer allows us to specify this variable and other optional parameters for the definition of the graphic



Creating a pie chart

1. Click **Reports**
2. Click **New**
3. Double click **Pie**

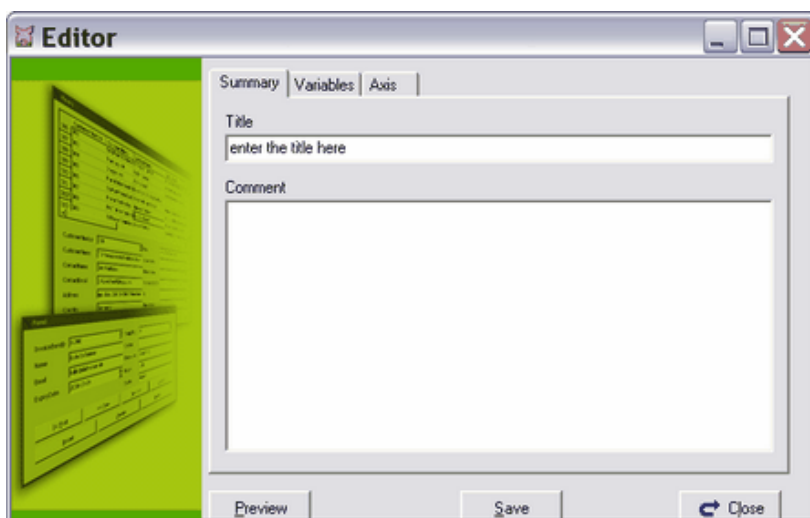
Summary sheet

Title

Title of the histogram that will appear on the top.

Comment

Text showing the dialog of the report selection.



Variables sheet

Table

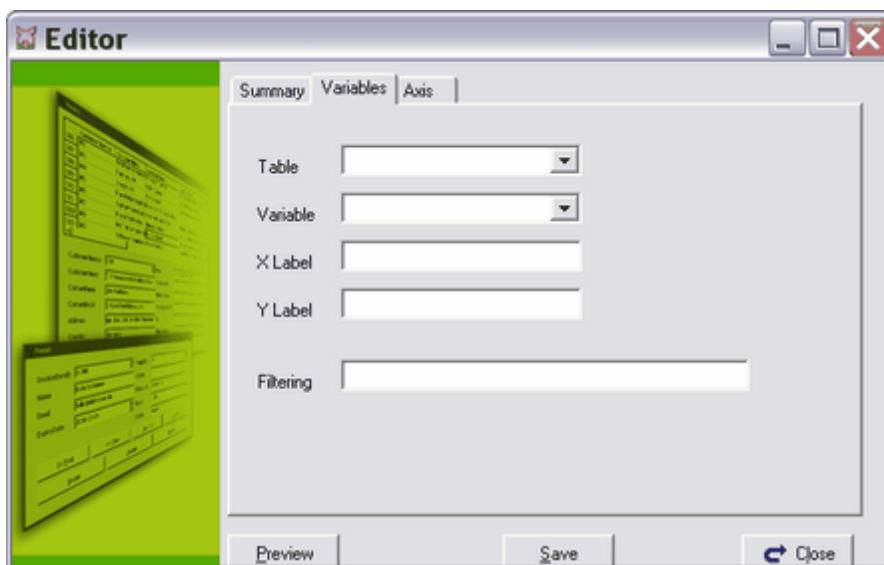
Name of the table used.

Variable

Variable, or mathematical expression of the function to be analyzed.

Filtering

Allows a search filter style SQL to be specified to limit the analyzed animals. Example: isactive=1 and services>3.



Axis sheet

There are 3 ways to define the ranges or bins: Automatic, Uniform and Free.

1. Automatic Scale

Porcitech automatically creates bins according the data.

2. Uniform Scale

When the variable is numerical, then you can define the ranges of a uniform scale defined by minimum and maximum values.

Mask

Mask of the horizontal axis if it is numerical. Examples: ##0.0 ### 0.000.

Minimum

Minimum value of the horizontal axis.

Maximum

Maximum value of the horizontal axis.

Increase

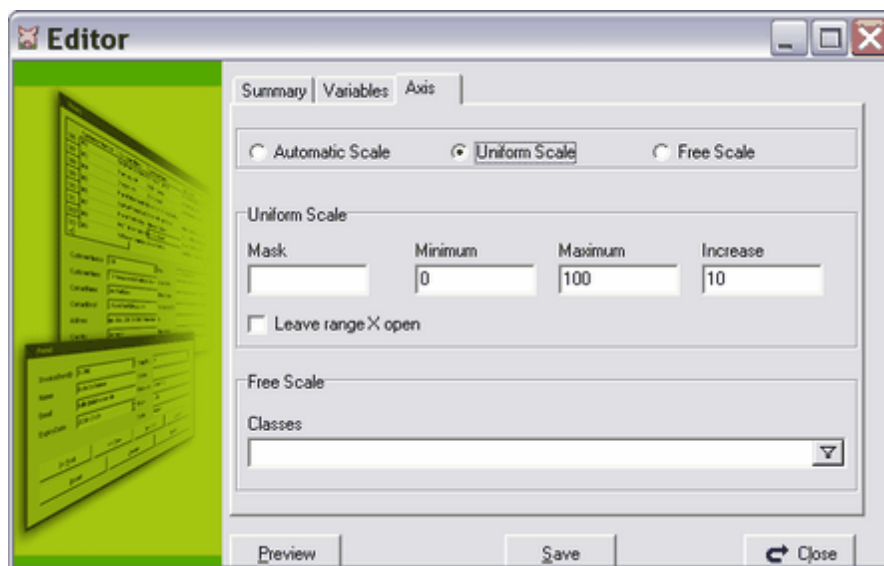
Increase between columns of the horizontal axis.

Leave Range X Open

You may include, or exclude, any data found outside the analyzed range of the histogram.

3. Free Scale

Sometimes is necessary to define each class or range. For example "0:10 11:50" defines 2 classes, from 0 to 10 and from 11 to 50.



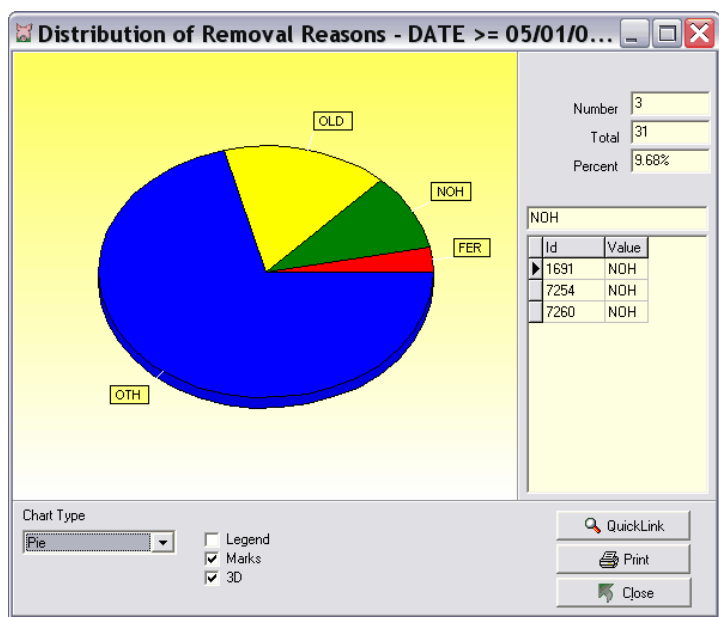
See also:

How to create a histogram report step by step

Pie chart for the remove reasons of females removed in 2004

15.5.2 View a pie

To see the results of a report, click **Preview** button, in the designer screen, or click Reports in main the menu, and then double click the report that you want to open.



The above histogram shows the distribution of removal reasons between 2 dates.

- Click a column to obtain detailed information about the animals.
- Click QuickLink button to open the selected animal card in the grid located in the right side.
- To zoom in on the area: Keep the left button of the mouse pressed down and select the desired area.

Number

Number of individuals belonging to the selected column.

Total

Count total all the analyzed values.

Percent

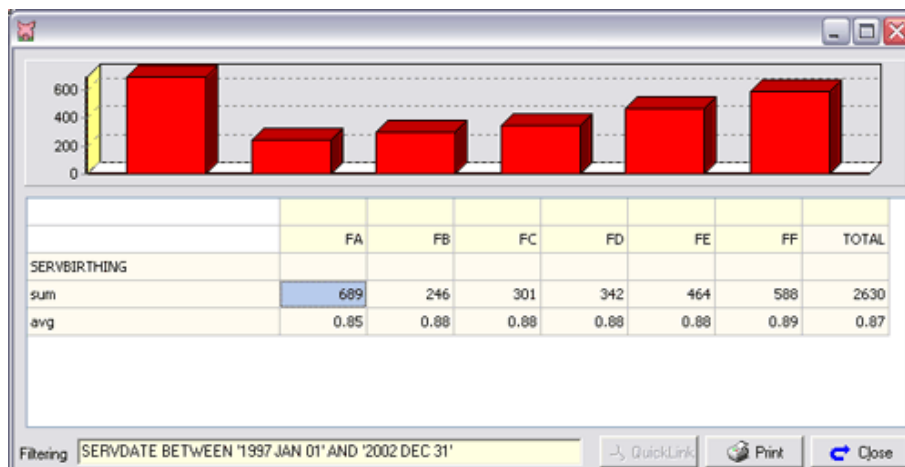
Percentage of the number of individuals belonging to the selected column over the total of analyzed individuals.

Range

Range of values of the selected column. '[' indicates that the value shown is included in the column, ')' is excluded.

15.6 Breakdown report designer

The Breakdown Report Designer analyzes one or more variables in relation to another variable used as a category breakdown. For example, a Breakdown Report could show the average number of totalborn, liveborn, and stillborn by each parity. In this case, parity is the breakdown variable. Categories or ranges for the breakdown variable can be specified. For each variable you want to analyze, you can specify mathematical functions such as count, sum, mean, standard deviation or geometric mean.



The above example shows the farrowing rate by farrow location.

Creating a Breakdown Report

1. Click **Reports**
2. Click **New**
3. Double click **Breakdown**

Summary sheet

Title

Title of the report that will appear on the top.

Description

Text showing the dialog of the report selection.

Variables sheet

Table

Name of table used.

Column Variable

Breakdown, or category variable used in the horizontal axis (columns).

Classes

Optional classes or range defined for the columns. Leave blank if you check "Columns are time periods".

Title

Title for the horizontal axis.

Columns are time periods

Check this box if the report is a trend, where the columns are time periods. The report will ask the time period parameters when you click Preview, or Open, so you do not need to add dates to your filter.

Note: If you select this feature, your column variable must be a date variable, such as ServDate, BirthingDate, etc.

Variables to Analyze

One or more variables chosen on which to perform a mathematical function. Only one variable for each row. Add the first variable by typing the variable name (variable names are not case-sensitive), or click the box in the right corner of the cell to bring up the variable list. Use the Enter key to add new variables below, or the Insert key to add new variables above.

Available functions

For each variable to analyze, one or more functions can be used: Count, Sum, Arithmetic Mean, Standard Deviation, and Geometric Deviation.

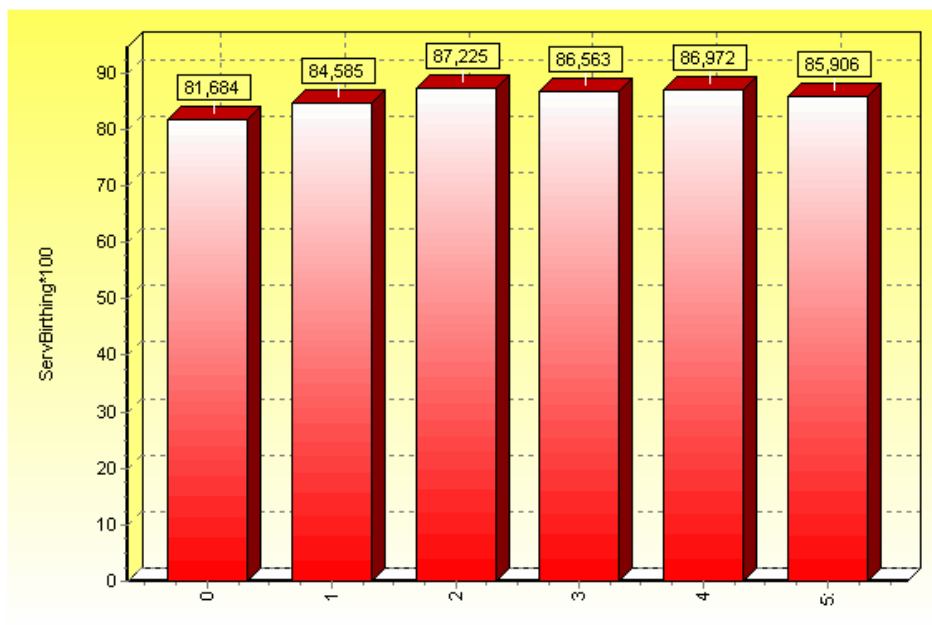
Filtering

Allows a SQL style search filter to be specified to limit the analyzed data. Example: isactive=1 and services>3. Character strings (which are case-sensitive) and dates must be enclosed using an apostrophe, such as Servdate= '11/20/12', or RemoveReason = 'LAME'

The screenshot shows the 'Editor' window with a green sidebar on the left containing a tree view of data sources. The main panel has two tabs: 'Variables' and 'Summary'. The 'Variables' tab is active, showing a 'Table' dropdown, a 'Columns' section with 'Variable' and 'Classes' input fields, and a 'Title' input field. There is a checkbox for 'Columns are time periods'. Below this is a 'Variables to Analyze' section with a list of variables and a plus icon. To the right is the 'Available Functions' section with checkboxes for Count, Sum, Arithmetic Mean, Standard Deviation, and Geometric Mean. At the bottom is a 'Filtering' input field. The window has 'Preview', 'Save', and 'Close' buttons at the bottom right.

15.7 XY Chart

The XY Chart Report Designer analyzes one or more variables in relation to another variable used as a category breakdown. For example, an XY Chart could show the farrowing rate by each parity. In this case, parity is the breakdown variable. Categories or ranges for the breakdown variable can be specified. You can specify mathematical functions such as count, sum, mean, standard deviation or geometric mean.



The above example shows the farrowing rate by parity.

Creating a Breakdown Report

1. Click **Reports**
2. Click **New**
3. Double click **XY Chart**

Summary sheet

Title

Title of the report that will appear on the top.

Description

Text showing the dialog of the report selection.

Variables sheet

Table

Name of table used.

Variable

Breakdown, or category variable used in the horizontal axis.

Classes

Optional classes or range defined for the horizontal axis.

Title

Title for the horizontal axis.

Variables to Analyze

One variable chosen on which to perform a mathematical function.

Available functions

Define a function to be used: Count, Sum, Arithmetic Mean, Standard Deviation, and Geometric Deviation.

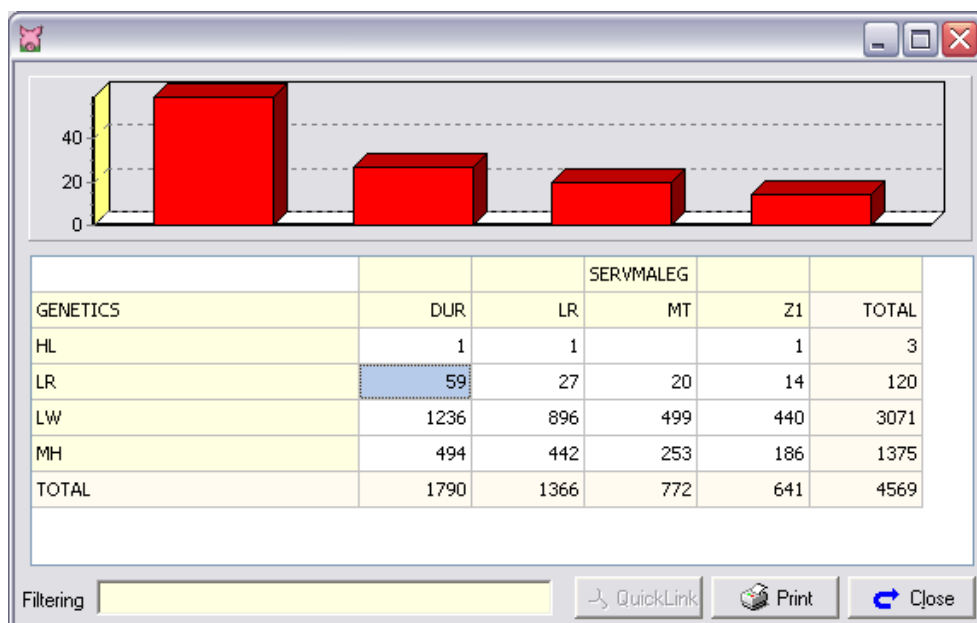
Filtering

Allows a SQL style search filter to be specified to limit the analyzed data. Example: isactive=1 and services>3.

15.8 Crosstab report designer

Cross-tabulation uses two variables and tabulates the results of one variable against the other. An example would be the cross-tabulation of parity and live born. Each female may have several recorded parities (the columns of the table) and her number of live born (the rows of the table) is recorded for each parity. So for each female, those pairs of values are entered into the appropriate cell of the table.

A cross-tabulation gives you a basic picture of how two variables inter-relate. It helps you search for patterns of interaction. Obviously, if certain cells contain a proportionately large (or small) numbers of cases, then this suggests that there might be a pattern of interaction.



The above example shows the number of litters born by genetic line.

Summary sheet

Title

Title of the histogram that will appear on the top.

Description

Text showing the dialog of the report selection.

Summary Variables

Title

Comment

Variables sheet

Variables Summary

Table ☐ Percents

Columns

Variable Classes

Title ☐ Columns are time periods

Rows

Variable Classes

Title

Filtering

Table

Name of the table used.

Filtering

Allows a search filter style SQL to be specified to limit the analyzed animals. Example: isactive=1 and services>3.

Columns

Variable

Variable or function to be analyzed in the horizontal axis.

Columns are Time Periods

Check on this box if the report is a trend, where the columns are time periods. The report will ask the time period parameters when it is opened.

Classes

Classes or bins can optionally defined for the horizontal axis.

Title

Title for the horizontal axis.

Rows

Variable

Variable or function to be analyzed in the vertical axis.

Classes

Classes or bins can optionally defined for the vertical axis.

Title

Title for the vertical axis.

Some examples:

Number of litters born by genetic line

15.9 Performance report designer

This report designer creates statistical trend reports for a pre-defined set of herd variables or custom mathematical expressions that can be defined.

The predefined variables are defined in the Performance table or Growing table. Using these variables, formulas and functions can be used to create new variables.

Type sheet

Analysis Type

- Herd Performance (Standard breakdown): Creates a general purpose performance report using the breeding performance table.
- Herd Performance (Service cohort breakdown): Creates a service cohort report using the breeding performance table.
- Group/Lot Performance (Trend): Creates a report using the group performance table.
- Closeout Performance (Cohort): Creates a report for closeout group.

When possible use week numbers in heading

If selected, Porcitech uses the week number instead of the date when the breakdown is by period, the interval is week, and the first day of each period matches with start of the week.

Variables Sheet

Use this sheet to define the report variables.

Title

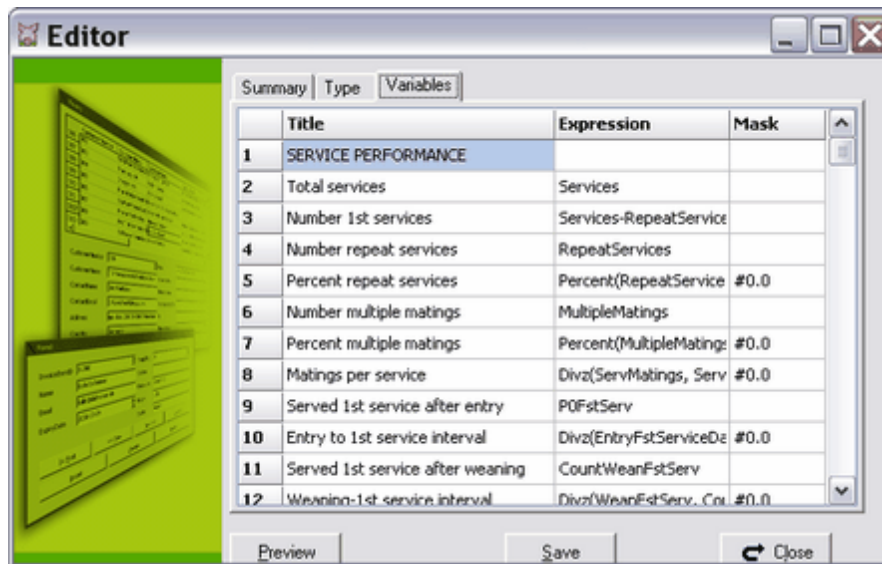
Title for the row. Enter any text to describe the row.

Expression

Mathematical expression to calculate the cell value. It can be a simple variable, for example **Services** or an expression **Liveborn + Stillborn**

Mask

Optional mask of the cell. Examples: ##0.0 ### 0.000.

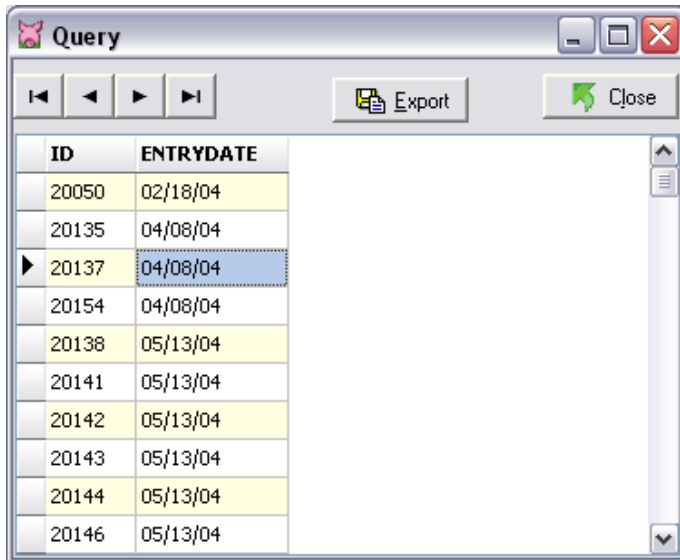


15.10 SQL Query report designer

15.10.1 SQL Query report designer

This report designer is a powerful visual tool that you can use to build, test, and save SQL statements for use in application data queries.

In the query screen, the SQL sentence can be directly typed in the box. However, most of cases is easier to use the wizard clicking **Wizard** button.



The screenshot shows a window titled 'Query' with a toolbar containing navigation arrows, an 'Export' button, and a 'Close' button. Below the toolbar is a table with two columns: 'ID' and 'ENTRYDATE'. The table contains 11 rows of data. The row with ID '20137' is selected, indicated by a blue highlight and a mouse cursor arrow pointing to it.

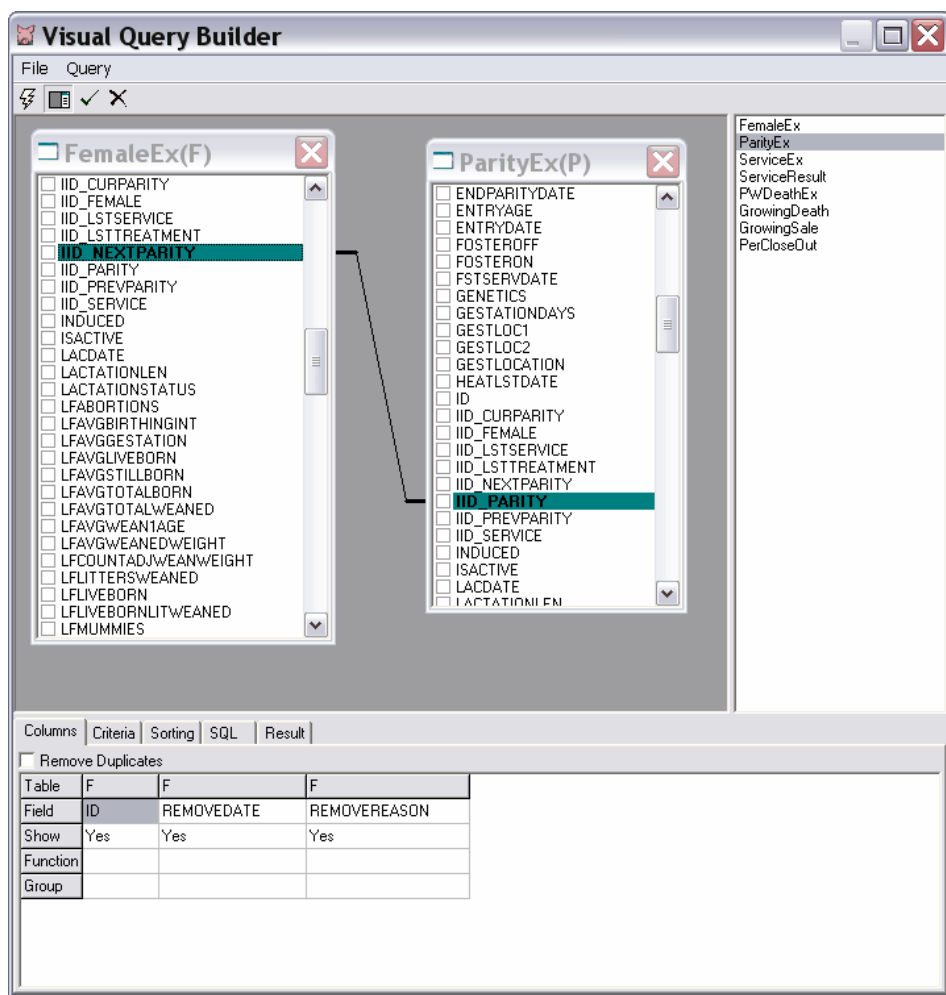
ID	ENTRYDATE
20050	02/18/04
20135	04/08/04
20137	04/08/04
20154	04/08/04
20138	05/13/04
20141	05/13/04
20142	05/13/04
20143	05/13/04
20144	05/13/04
20146	05/13/04

The above example shows a list of females and their entry date.

How to do a simple query

A simple query is list of row from a single table, selecting the variables to see, filtered by criteria and sorted by 1 or more variables.

1. The available tables appear in the right side of the screen. Drag and drop the table that you need to use to left side.
2. In the field list box, select the fields that you want to see.
3. Click **Criteria** sheet
4. Double click the first empty cell. The Expression builder should appear.
5. Enter the filter and click **Ok**
6. Click **Sorting** sheet
7. Select the variable to sort and click **Add**. You can order by more than 1 variable.
8. Click **SQL** button to generate the SQL statement.
9. Click **Run SQL** button to see the results of your query.
10. Click **Accept Query** to close the wizard



See also:

- How to create a SQL query report
- Join tables with the Wizard
- Active unmated breeding females
- Number of unmated breeding females by age
- Hour of first mating on reproductive performance

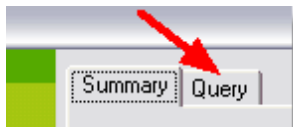
15.10.2 How to create a SQL query report

In this step by step, we will show how to create a treatment histogram. See Current repeat females chapter. The user question is:

I want to see a list of females with 2 or more services in the current parity. In this list, I would like to show female Id, status, service date and number of service.

Instructions to create the above report:

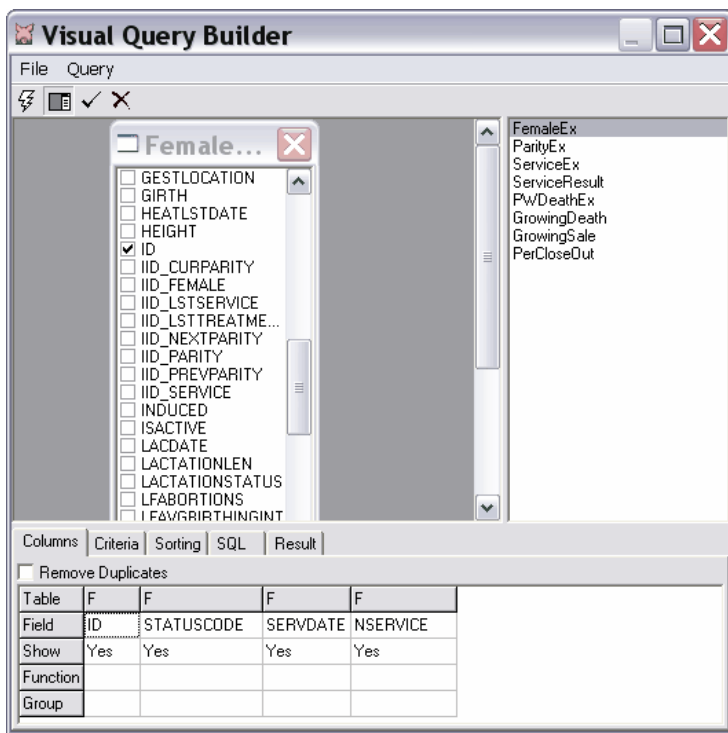
1. Click **Reports**.
2. Click **New**.
3. Double click **SQL Query**.
4. Click **Query** sheet.



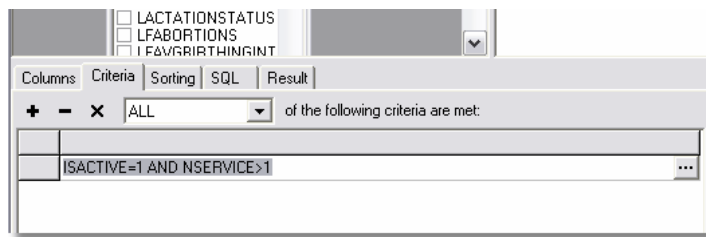
5. Click **Wizard** button. The available tables appear in the right side of the screen.



6. Drag and drop the **FemaleEx** table to use to left side.
7. In the field list box, select the fields that you want to see. In this example: **ID, STATUSCODE, SERVDATE, NSERVICE**.



8. Click **Criteria** sheet.
9. Double click the first empty cell. The Expression builder should appear.
10. Enter the filter, in this example **ISACTIVE=1 AND NSERVICE>1**
11. Click **Ok**.

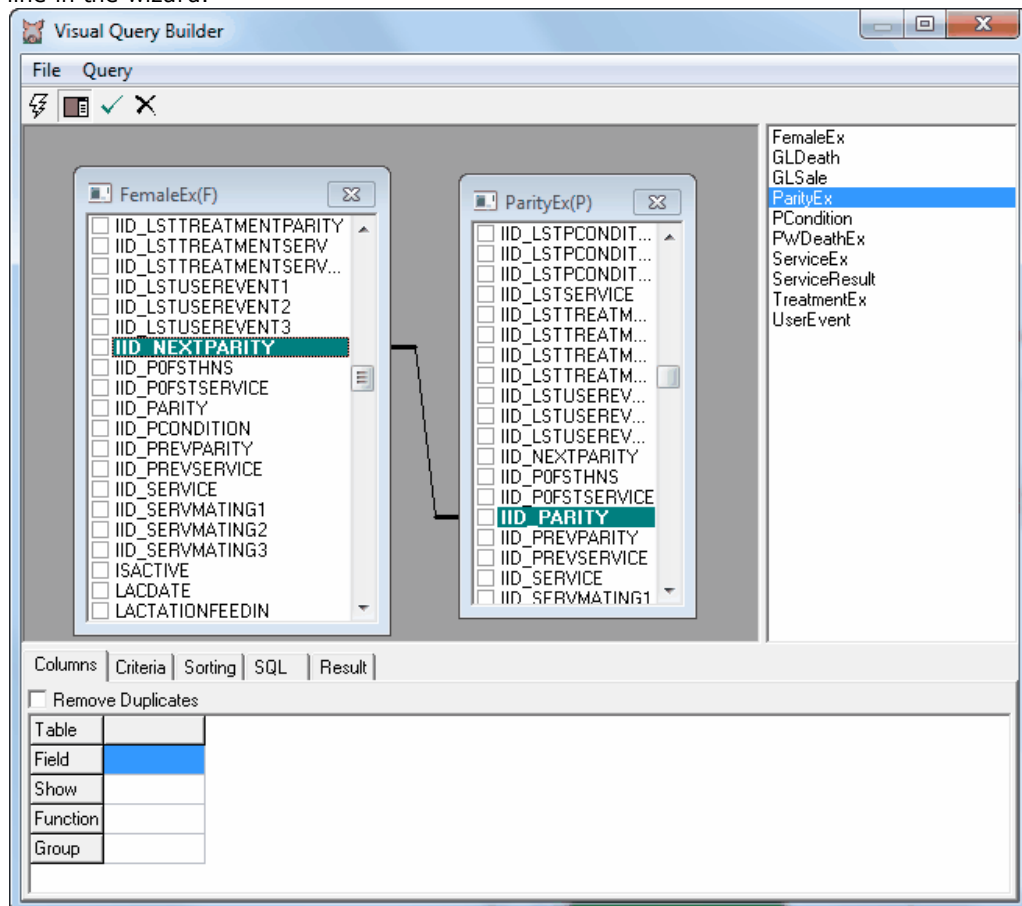


12. Click **Sorting** sheet
13. Select the variable to sort, in this example **ID**.
14. Click **Add**.
15. Click **Accept Query** to close the wizard.
16. Click **Preview** button to see the report.
17. Click **Save** button to save the report.

15.10.3 Join tables with the Wizard

In some cases, it is necessary to join two or more tables. The JOIN keyword is used in an SQL statement to query data from two or more tables, based on a relationship between certain columns in these tables. You can use the JOIN operator when you write the SQL statement or you can use the Wizard to automatically create the joins.

1. The available tables appear in the right side of the screen. Drag and drop the tables that you need to use to left side.
2. In the field list box, select the fields that you want to see.
3. To link two columns of different tables, drag and drop relationship column from a table to the other table. The two columns must be the same type data. After dropping, the link is showed as a black line in the wizard.



4. Right click the black line and select **Join Params** to edit the JOIN properties.

The 'Link Options' dialog box is shown. It contains two sections for table and field selection:

- Table 1: **F**
- Field 1: **IID_NEXTPARITY**
- Table 2: **P**
- Field 2: **IID_PARITY**

Below these are two groups of radio buttons:

- Join operator:**
 - ☒ =
 - ☐ >
 - ☐ <
 - ☐ >=
 - ☐ <=
 - ☐ <>
- Join Type:**
 - ☒ Inner Join
 - ☐ Left Outer Join
 - ☐ Right Outer Join
 - ☐ Full Outer Join

At the bottom right are 'OK' and 'Cancel' buttons.

15.10.4 Replacing display values

SQL provides a function called CASE. It allows the result of a column to be determined by the results of a case expression.

For example **ServType** variable returns A, N or C according to the service type (AI, natural mating or combination, respectively). If you want to display a readable text instead of the service type code:

```
SELECT
  ServDate,
  CASE ServType
    WHEN 'A' THEN 'Artificial insemination'
    WHEN 'N' THEN 'Natural mating'
    WHEN 'C' THEN 'Combination matings'
  END
FROM Service
```

Another example, the **Score** variable contains the score entered in the Physical Condition event. It is a numeric value, in this example from 0 to 100. You can assign a text category according to the number, for example 0-49: bad, 50-79: good, 80-100: excellent. The sql statement would be:

```
SELECT
  CASE
    WHEN Score BETWEEN 0 and 49 THEN 'Bad'
    WHEN Score BETWEEN 50 and 79 THEN 'Good'
    WHEN Score BETWEEN 80 and 100 THEN 'Excellent'
  END
FROM FemaleEx
```

See any SQL manual for more information.

15.11.2 Exporting to Excel

An Excel document is based in columns and rows. The list report designer in Porcitech is based in bands and the position of each element does not necessarily align with a spreadsheet. Due to the different nature of the two systems, exporting from the Porcitech report designer to Excel does not always provide you with the results that you expect. It is not a bug or an error, it is a question of design.

You can modify the report, "playing" with the position boxes, trying to align the components of the headers with the components of the detail band. It is trial and error.

Another way is to use the SQL report designer to make the list. This report designer is based in rows and columns, like MS Excel, and the exportation to Excel is direct.

15.11.3 How to add a summary in a list report

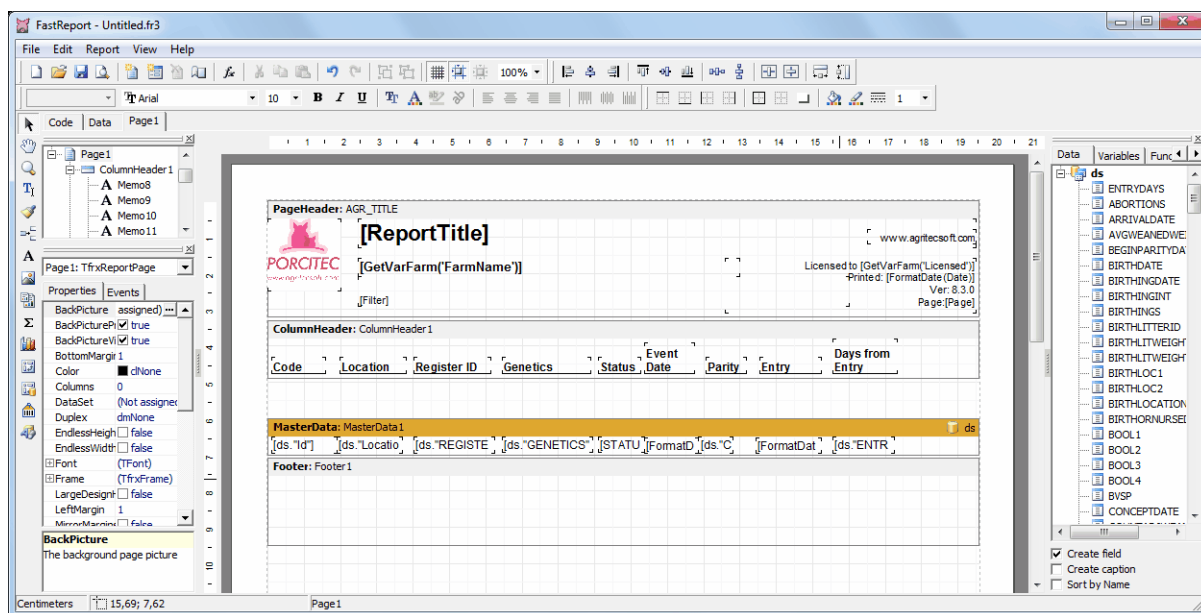
A list report is a simple list organized in rows and columns. Each column is a data type and each row is a record. For example, we can list females, where each row is a female, and each column shows different information: ID, birthdate, parity, performance, etc...

After creating a list report, a user may want to include a summary in the bottom of the report, showing the sum or breakdown for specific columns. For example, if the list is for females with columns ID, parity, birthdate, and days from entry, possible options might be to show the total numbers of females, or a breakdown of days from entry interval.

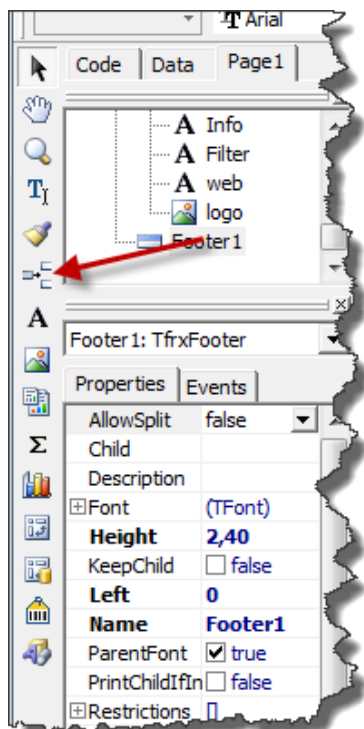
Agritec application also offers a breakdown report designer for these type of cases. It is usually faster and easier to do than with the list report designer. However, sometimes the user may want the breakdown at the end of the list report.

In this tutorial, I will show you how to add different types of summaries: counters, sums and breakdowns.

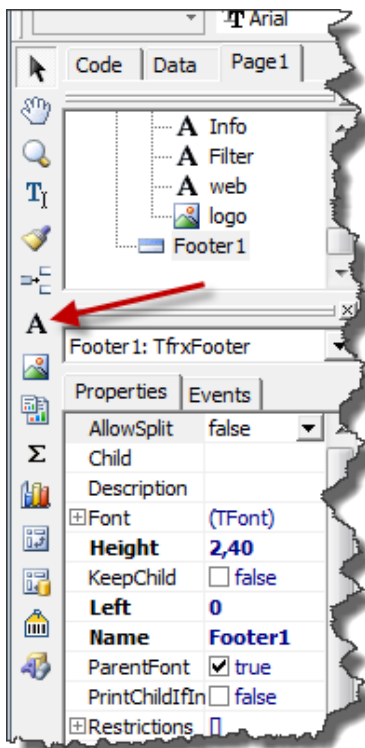
Go to Reports, select the report and click Design button. You will see the report layout:



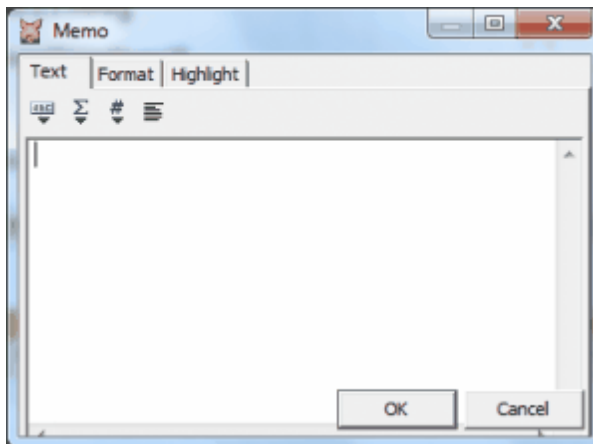
If the report layout does not have the Footer band, click Insert Band button, at left, and then select Footer band.



To add the expression, click Text button. Move the mouse to the Footer and and left click to drop the text box.



At this point, the designer needs the expression for calculating the desired value.



Adding a counter

To add the number of records of the list, you must use the following expression in the Memo Box:

[COUNT()]

When you click Preview button. The new box placed in the footer will show the total number of records.

If you want to show a label and the total value, use the following expression:

Records: [COUNT()]

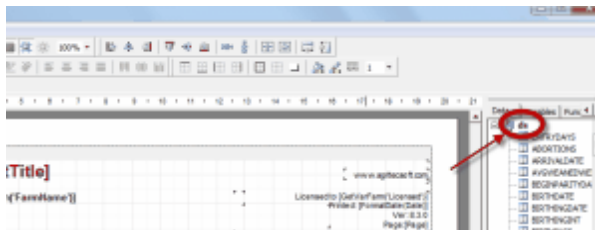
Adding a sum

For example, we want to sum the total number of abortions of the listed females. The variable name is LfAbortions. Then the expression for the sum is:

[SUM(<ds."LfAbortions">)]

The syntax is not very helpful, but in expressions the fields are always noted as <Dataset."Column Name">

"Dataset" is the dataset name, which you can see in the Data panel. Predefined reports usually name it as "ds", but it can take any name.



"Column Name" is the name of the variable.

Adding a breakdown: Number of records between two values

For example, now we want to show the number of females that have days from entry between 0 to 99. You can add more classes as needed, for example from 100 to 199, 200 to 299, and so on. The variable in this example is called EntryDays. The expression is:

[SUM(IIF((<ds."EntryDays"> >=0) AND (<ds."EntryDays"> <=99) , 1, 0))]

Replace "EntryDays" by the desired variable, and 0 and 100 by your desired range. For example, for calculating entry days between 100 and 199:

[SUM(IIF((<ds."EntryDays"> >=100) AND (<ds."EntryDays"> <=199) , 1, 0))]

The following image shows the result:

Adding a breakdown: Number of records between two values in percentage

Following the above example, now we want to show the number of records between 100 and 199, but as a percentage of the total number of records. The new expression is:

```
[SUM(IIF((<ds."EntryDays"> >=100) AND (<ds."EntryDays"> <=199) , 1, 0)) * 100 / COUNT())]
```

Adding a breakdown: Number of records between two values in percentage of a subset of records

Following the above example, now we want to show the number of records between 100 and 199 as percentage of a count of a subset of records, not all records. For example, the subset could be females with genetics value.

The expression for counting the number of females with a genetics value is:

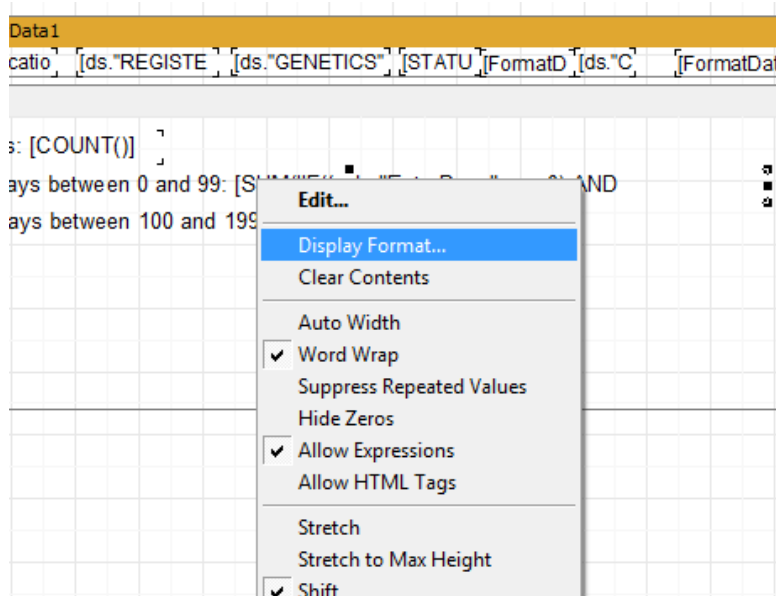
```
[SUM(IIF(<ds."Genetics"> = null, 0, 1))]
```

In consequence, and following the above example, the percentage value is:

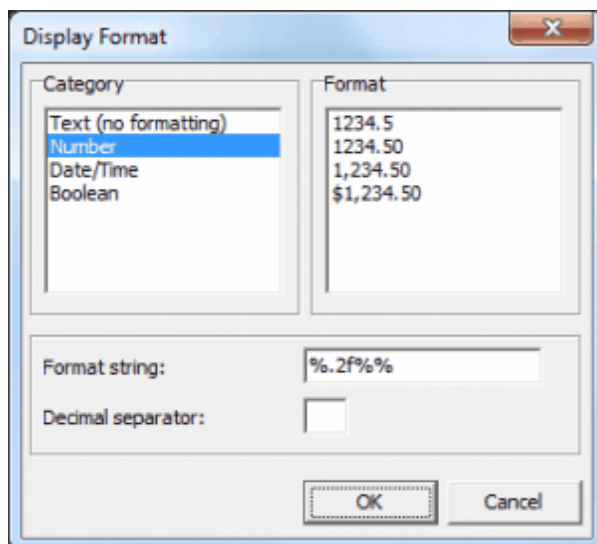
```
[SUM(IIF((<ds."EntryDays"> >=100) AND (<ds."EntryDays"> <=199) , 1, 0)) * 100 / SUM(IIF(<ds."Genetics"> = null, 0, 1))]
```

How to format the decimals

The above example can generate numbers like 34.23145 or 1.243664. To format the expression value to a readable format like 34.32% or 1.24%, right click the Text box and select "Display Format..." option.



Select Number option in Category list box. Then enter `%.2f%%` in the Format String box. Finally click Ok button.

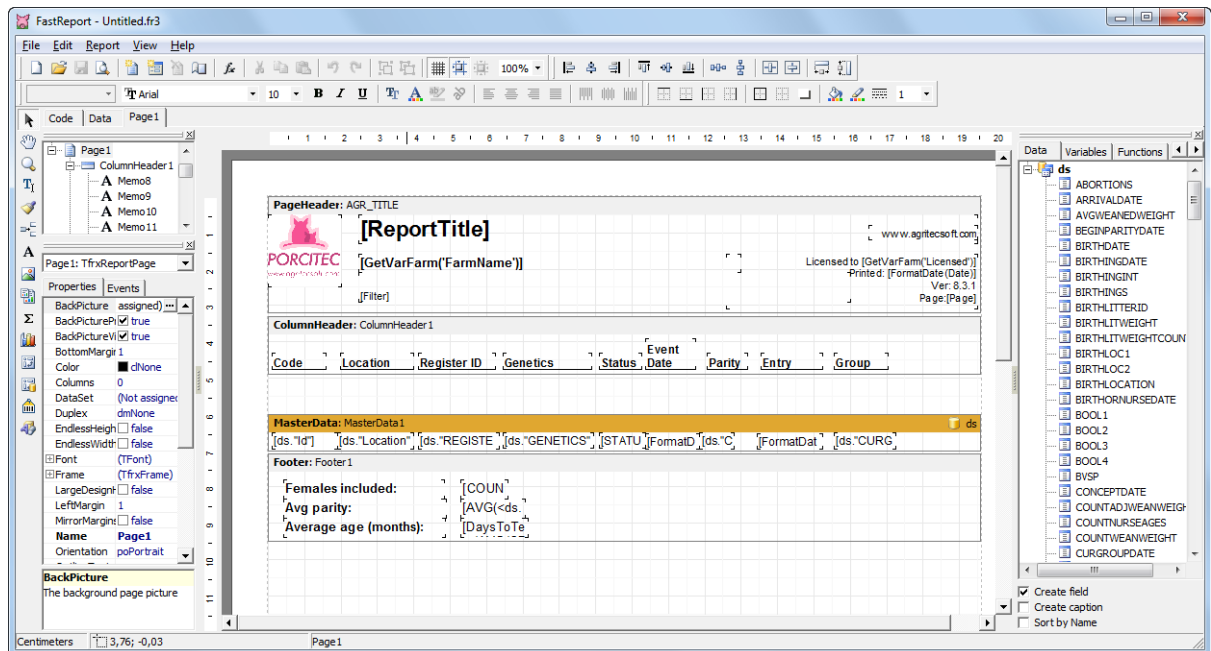


15.11.4 How to print data in columns

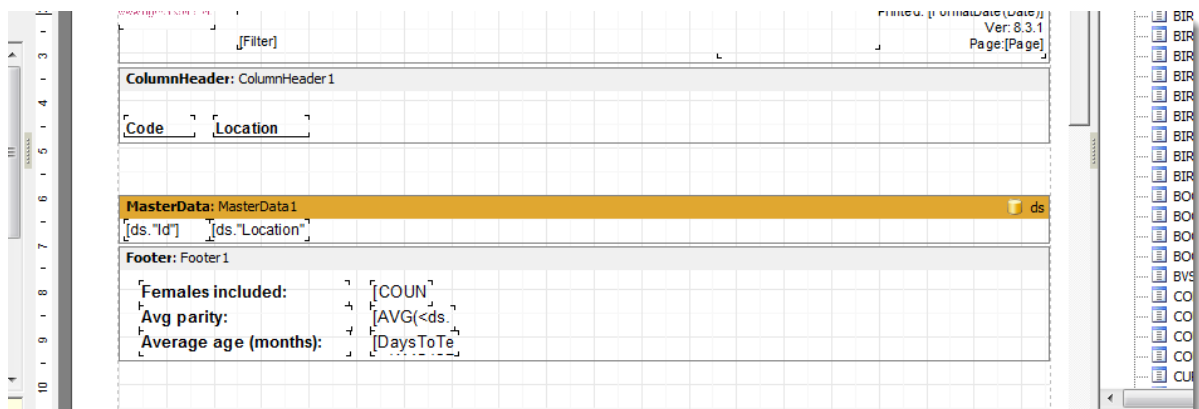
If you want to print a data list in columns to save paper, you can modify the report using the report designer. You will first remove the fields you do not need. It releases space that you can use for organizing the data in 2 or 3 columns.

For this example, I have selected "Current Status Females", under the "Breeding Herd" sheet of Reports menu.

Click Reports at the main menu and select the report to modify. Then click the Design button. Click Ok in the Filter Options screen. Now you will see the report layout:



Remove the fields that you do not need by selecting each of them with the mouse and then click the DEL key. Then arrange the remaining fields to the left side of the layout. In this example, I only want the ID and the location fields:



Click File in main menu and then Page Settings. Click "Other Options" sheet and enter 3 in the Columns / Number box. Finally click Ok.

The 'Page Options' dialog box has two tabs: 'Paper' and 'Other options'. The 'Other options' tab is selected. Under the 'Columns' section, the 'Number' is set to 3, 'Width' is 6,53 cm, and 'Positions' are 0, 6,53, and 13,06. Under the 'Other' section, there are five unchecked checkboxes: 'Print to previous page', 'Mirror margins', 'Endless page width', 'Endless page height', and 'Large height in design mode'. The 'Duplex' dropdown is set to 'Default'. At the bottom are 'OK' and 'Cancel' buttons.

Now the report designer shows 3 column divisors. Arrange the footer fields to fit in the column space. Click Preview button to see the results:

The report preview shows the title 'Current Status Females' and the company logo 'PORCITEC'. The location is 'KINGSTON' and the current status is 'Active'. The report is printed on 11/02/11, version 8.3.1, page 1. The data is presented in three columns, each with 'Code' and 'Location' headers.

Code	Location	Code	Location	Code	Location
06010		06149		06266	
06013		06150		06269	
06015		06151		06274	
06017		06152		06275	
06024		06157		06276	1-18
06028		06160		06277	
06034		06170		06280	
06041	14-45	06172		06281	
06045		06174		06282	11-32
06052		06176		06286	

Finally close the Preview button and click Save button to save the new report layout. The new report will be saved to your User folder. You cannot overwrite the original program report.

15.11.5 How to insert bar codes into forms

Many times data collection forms are printed from Porcitech for operators to record routine data and then the completed forms are entered into Porcitech.

Part of this process can be automated by using bar codes.

Print the animal ID as a bar code

1. From the report designer **Data List**, click on **Bar Code Object** button in the left panel.
2. Drag the object to the Detail band and click to drop it.
3. A **Bar Code Editor** parameter dialog will be displayed.
4. In **Code**, enter the variable name you want to see. For example **<ds."ID">** if the dataset is called **ds** and the field name is **ID**.
5. Select the bar code type in **Type Of Bar**, the most usual are **EAN13** or **Code39**.
6. Uncheck **Text** if you do not want to include the text under the bar codes.

Print the farm ID as a bar code.

1. From the report designer *Fast-Report*, click on **Bar Code Object** button, in the left panel.
2. Drag the object to the **Header** band and click to drop it.
3. A **Bar Code Editor** parameter dialog will be displayed.
4. In **Code**, enter the variable name you want to see. In this case **GetVarFarm('FarmPremise')**.
5. Select the bar code type in **Type Of Bar**, the most usual are **EAN13** or **Code39**.
6. Uncheck **Text** if you do not want to include the text under the bar codes.

Request to print a bar code before printing

Sometimes the same data is repeated in a form. For example, forms are handed to several workers, each one is responsible for each form and all work is distributed. Another example: One form is printed per day. The data in the form has the same date.

In these cases, it is advisable that you request Porcitech to print the value in all pages.

1. From the report designer *Fast-Report*, click **File, New Dialog**.
2. Select **Edit Control** and drop it on the form.
3. Select **Button Control** and drop it on the form.
4. In the **Object Inspector**, select the **Modal Result** property **mrOk**.
5. Go back to the report designer.
6. Click in the **Bar Code Object** button in the left panel.
7. Drag the object to the **Header** band and click to drop it.
8. A **Bar Code Editor** parameter dialog will be displayed.

-
9. In **Code**, enter the variable name you want to see. In this case **Edit1.Text**
 10. Select the bar code type in **Type Of Bar**, the most usual are **EAN13** or **Code39**.
 11. Uncheck **Text** if you do not want to include the text under the bar codes.

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



16 Variables

16.1 Agritec Variable Dictionary

Introduction

Porcitech uses a standard database model called relational. A relational database system contains one or more objects called tables. The data or information for the database is stored in these tables. Tables are uniquely identified by their names and are comprised of columns and rows. Columns contain the column name, or variable, data type, and any other attributes for the column. Rows contain the records, or data, for the columns. Here is a sample table called "Customers".

The columns are the variable names, in this example Name, Surname, Address, City and phone. The rows contain the data for each variable in this table:

Customers				
Name	Surname	Address	City	Phone
John	Gandalf	River, 56	Tucson	845235235
Joseph	Martinez	Street nº34	Los Angeles	745923534
Lou	Smith	67 Boyd Court	Smoke Lake	348709546
Barb	Skywalker	610 Chinook	Pullman	345466456

Primary tables

Female table

Each record, or row, is a female. It contains the variables that are permanent to the life of the animal, such as genetics, birthdate, origin, entry date and other variables in the Current Status sheet of the female file. It contains the variables related to the *current* parity of the female (or her last parity if she has been removed).

Parity table

Each record, or row, is a parity. The data of each record refers to a specific parity and contains the variables related to the birth and weaning of Pigs.

Service table

Each record, or row, is a service. The data of each record refers to a specific service.

PWDeath table

Each record is a preweaned death event.

Treatment table

Each record is a treatment event.

Mating table

Each record is a mating event.

Performance table

Each row is a period of time defined by the user. This table includes all statistical data incurred in the breeding herd.

Complex tables

Primary tables are joined to build more complex tables, by combining variables from multiple tables:

FemaleEx Table

FemaleEx table joins the columns of the Female+Parity+Service tables. Each record is a female and includes variables related to the current parity, the last service in the parity, and the last treatment.

ParityEx Table

ParityEx table joins the columns of the Female+Parity+Service tables. Each record is a parity, and includes the female data, the birthing and weaning variables, and the service variables related to the last service in the parity. **Important:** The record begins with a birthing event. Service related variables in this table are of the same parity as the birthing and refer to the service after the weaning event.

ServiceEx Table

ServiceEx table joins the columns of the Female+Parity+Service tables. Each record is a service, and includes the female, the parity, and all services a single parity. Note that in a service that results in a birthing, the birthing occurs in the next parity, so if you need birthing information pertaining to a service result use ServiceResult table instead of ServiceEx.

ServiceResult Table

ServiceResult table joins the the Female+Service+Parity tables. Each record is a service, and includes the female data, services data and the next parity birthing variables that may result from the service. The record begins with a service event and ends with the weaning event in the **next** parity.

PwDeathEx Table

PwDeathEx table joins the columns of the Female+Parity+PwDeath tables. Each record is a pre-weaned death event, and includes the female and the parity table information.

TreatmentEx Table

TreatmentEx table joins the columns of the Female+Parity+Treatment tables. Each record is a treatment, and includes the female and the parity table information.

For example, if you need the information about one female (ID, genetics, ...) to include all her parities (farrowing date, liveborn, ...) you need to use the ParityEx table instead of FemaleEx table.

A female record from the Female table can have several parity records in the Parity table, and in turn a Parity record can have several service records in the Service table.

For example, the following SQL sentence:

```
SELECT Id, Location, Parity FROM ParityEx
```

This sentence selects a data set where each row is a single parity and there are 3 columns: Id, Location and Parity. It will show:

ID	Location	Parity
45	235	1
45	235	2
45	235	3
...		

Location variable shows the current location because this field belongs to the Female table. Female table always refers to the current parity or status of the female. In the above example, the Location value is always 235 for the ID 45 because in all cases, it refers to the current value.

Now, we want to see all service dates. In this case Service table will be used.

```
SELECT Id, Location, Parity, ServDate FROM ServiceEx
```

Each row is a service

ID	Location	Parity	ServDate
45	235	1	09 JAN 03
45	235	1	21 JAN 03
45	235	2	15 JUN 03
45	235	3	30 NOV 03
45	235	3	15 DEC 03
...			

Note that Parity variable is valued at 1 for the first 2 services: 9Jan03 and 21Jan03. These 2 services occurred in parity 1. Parity 2 includes only one service on 15Jun03, and finally parity 3 includes 2 services, 30Nov and 15Dec.

16.2 Female

ArrivalDate	Arrival date
BirthDate	Birthdate of the animal
Birthings	Number of Farrowings recorded in a female's history. This value can be different from Parity if Initial Parity does not = 0 when a female is entered into the breeding herd. Parity = Initial Parity + Births. Births only refers to recorded Farrowings. It
BirthLitterId	Litter ID of the female
Bool1	User variable Bool1
Bool2	User variable Bool2
Bool3	User variable Bool3
Bool4	User variable Bool4
BVSP	Breeding Value Sow Productivity
Comment	Any user-defined Comment inserted in the Current Status sheet

CurBirthLocation	Current farrowing location. A Location event that is entered within 14 days before or after a farrowing event.
CurLabels	Assigned labels separated by semicolon
CurGroupDate	Date of last group change
CurGroupId	Current group Id
CurLoc1	Location level 1
CurLoc2	Location level 2
CurLoc3	Location level 3
CurParity	Current parity number of the breeding female
CurPreweaneds	Current number of preweaned animals of females with lactating status
Dam	Dam of the animal, defined in Genealogy sheet of the File
DateTime1	User variable DateTime1
DateTime2	User variable DateTime2
DateTime3	User variable DateTime3
DateTime4	User variable DateTime4
Decimal1	User variable Decimal1
Decimal2	User variable Decimal2
Decimal3	User variable Decimal3
DueBirthDate	Estimated Farrowing date, calculated from the date of the last service in the current parity + gestation length in days, as defined by the user in Options Time Intervals
DueHeatDate	Date to observe for estrus, determined by the average length of an estrous cycle, as defined by user in Options Time Intervals. It includes served and weaned females.
DuePrebirthDate	Date to perform a pre-Farrowing task, determined by number of days before the estimated Farrowing date as defined by user in Options Time Intervals
DuePregCkDate	Date to test for pregnancy confirmation, determined by number of days after service as defined by user in Options Time Intervals
DueWeanDate	Date for a lactating female to be weaned, determined by the number of days after Farrowing as defined by user in Options Time Intervals

EID	Electronic Identification
EntryAge	Age at entry
EntryDate	The date on which a breeding animal enters the breeding herd
EntryWeight	The weight of a breeding animal when it enters the breeding herd
FstBirthingDate	First farrowing date
Genetics	Genetics or breed
HeatLstDate	The date of the last heat recorded for a female (heat not served or service event)
HNSFstServCount	Number of Heat Not Served events before the first service in the life of the female. It may include HNS events before Entry date
P0HNSFstServCount	Number of Heat Not Served events before the first service in the life of the female and after Entry date
Id	Primary animal identification
IID_CurParity	Foreign key to current parity
IID_EntryEvent	Foreign key to entry event
IID_Female	Internal female identification. Used to link several tables together. Using a relational model, sometimes is necessary to join 2 or more tables. For example SQL can use Females.ID and Parity.ID to join these 2 tables, but it is not efficient (more time co
IID_LstHns	Foreign key to the las heat not served in the lifetime of the female
IID_LstPCondition	Foreign key to last physical condition event
IID_LstPConditionA	Foreign key to last physical condition event with A type
IID_LstPConditionB	Foreign key to last physical condition event with B type
IID_LstPConditionC	Foreign key to last physical condition event with C type
IID_LstTreatment	Foreign key to last treatment
IID_LstUserEvent1	Foreign key to last user event 1
IID_LstUserEvent2	Foreign key to last user event 2
IID_LstUserEvent3	Foreign key to last user event 3
IID_LfFstHns	Foreign key to the first heat not served in the lifetime of the female

IID_POFstHns	Foreign key to the first heat not served in the lifetime of the female, before the first service and after the Entry event
IID_POFstService	Foreign key to first service of parity 0
IsActive	Active/Inactive status. If the animal is active, ISACTIVE will be 1, if it is removed it will be 0
LacDate	Begin date of current lactation. The lactation can begin with a farrow or an abortion that is followed by a Nurse On event. If she is not lactating, the value is NULL
LactationStatus	Lactation status indicated by a numeric value: 0 None (unmated breeding female), 1 Not Lactating, 2 Lactating
LfAbortions	The total number of abortions for the lifetime of the female
LfAvgBirthingint	The average Farrowing interval for the lifetime of the female
LfAvgGestation	The average gestation length for the lifetime of the female
LfAvgLiveborn	The average number of liveborn per parity for the lifetime of the female
LfAvgStillborn	The average number of stillborn per parity for the lifetime of the female
LfAvgTotalborn	The average number of total born per parity for the lifetime of the female
LfAvgTotalWeaned	The average number of weaned per parity from Wean and Part-Wean Events for the lifetime of the female. Includes number weaned from nurse litters.
LfAvgWean1Age	Average age of weaned animals of birth litters for the lifetime of the female
LfAvgWeanedWeight	The average weight of weaned animals for the lifetime of the female
LfBirthingRate	Farrowing rate for the lifetime of the female
LfBornYear	The total number of animals born per year
LfCountAdjWeanWeight	Number of animals with adjusted weights
LfGestationDays	Sum of gestation days for the lifetime of the female. If she is served, it adds the days from service
LfLittersWeaned	The total number of litters weaned for the lifetime of the female
LfLiveborn	The total number of liveborn for the lifetime of the female
LfLivebornLitWeaned	The number of liveborn for litters weaned or nursed off during the lifetime of the female

LfMummies	The total number of mummies for the lifetime of the female
LfNetadded	The sum of animals fostered on minus fostered off for the lifetime of the female, as recorded with the Foster event
LfNetFostered	The total number of net fosters for the lifetime of the female. Includes both foster and nurse events.
LfNetFosterParity	Animals fostered on with a foster event - fostered off with a foster event + nursed on with a nurse on event - nursed off with a nurse off event with the corresponding wean event.
LfPreweanedMortality	The average preweaning mortality for the lifetime of the female
LfRecordedPwDeaths	The total number of preweaned deaths for the lifetime of the female
LfServices	The total number of services for the lifetime of the female
LfStillborn	The total number of stillborn for the lifetime of the female
LfSumAdjWeanWeight	The sum of litter weights at weaning for litters weaned in the lifetime of the female. Includes nurse litters
LfTotalborn	The total number of total born for the lifetime of the female
LfTotalWeaned	The total number of animals weaned for the lifetime of the female
LfWean1Num	Total number weaned from a female's birth litter for the life of the female.
LfWeanedYear	Total number weaned per year
LfFstHnsDate	First HNS date for the life of the female
LfLstHnsDate	Last HNS date for the life of the female
Location	Current location
LstLifeComment	Last comment event in the lifetime of the animal
LstLocationDate	Last location event date in the animal's record
MGrandDam	Maternal granddam of the animal, defined in Genealogy sheet of the File
MGrandSire	Maternal grandsire of the animal, defined in Genealogy sheet of the File
Morphscore	Morphologic score entered in the Current Status sheet of the File
Name	Animal name entered in the Current Status sheet of the File

Origin	Animal origin
OriType	Origin type. 0 raised, 1 purchased
P0FstServDate	First service date in the lifetime of the female. NULL if unknown, initial parity is not zero or farrowing without service
PGrandDam	Paternal granddam of the animal, defined in Genealogy sheet of the File
PGrandSire	Paternal grandsire of the animal, defined in Genealogy sheet of the File
PhotoDir1	Directory of photo 1
PhotoDir2	Directory of photo 2
RegisterId	Register or alternate ID of the animal
RemoveDate	The date an animal is removed from the herd.
RemoveReason	The reason an animal is removed from the herd.
RemoveStatusCode	Status of the breeding female at remove event.
RemoveType	Removal type
RemoveTypeId	Removal type: 0 Death, 1 Slaughtered, 2 Transferred, 3 Exported
ReproStatus	Reproductive status indicated by a numeric value: 0 None (unmated breeding female), 1 Open (not-pregnant, but with at least one mating event in her history record), 2 Served (served, assumed pregnant), 3 Diagnosed Pregnant (served with a positive pregnanc
Serv1Age	Age of the female at first service. The birthdate must be recorded for this to be calculated.
ServLstDate	Last service date in a female's record, defined by the date of the first mating of the last service. Unlike ServDate variable, which is null when it occurs before Arrival Date in recipient farm if the female was transferred, ServLstDate is always the las
Sire	Sire of the animal, defined in Genealogy sheet of the File
SiteName	Site name of location level 1
StatusCode	Current status of the breeding female. A female will have her status updated to the following by the corresponding events: E Entry, H Heat Not Served, S Served, N Pregnancy Diagnosis = Negative or Observed not pregnant, P Pregnancy Diagnosis = Positive,
StatusDate	Date of the last event that has updated the STATUS variable

Text1	User variable Text1
Text2	User variable Text2
Text3	User variable Text3
Text4	User variable Text4
Text5	User variable Text5
Text6	User variable Text6
Text7	User variable Text7
Text8	User variable Text8
Text9	User variable Text9
ToBeRemoved	If the 'To be Removed' checkbox of the Current Status sheet of the File is checked, TOBEREMOVED will be 1, if not checked it will be 0
AvailableBreedingDate	The date on which a breeding animal enters or is transferred from other farm to the breeding herd

16.3 Parity

Abortions	Number of abortions
AvgWeanedWeight	The average weight per animal at weaning from litters weaned. Includes animals weaned from nurse litters
BeginActiveParityDate	Begin active parity date. It uses the arrival date for received females
BeginParityDate	Begin parity date
BirthingDate	Farrowing date
BirthingInt	Interval in days from farrowing to previous farrowing
BirthingProblem	Problem at farrowing
BirthingTech	Technician at farrowing
BirthLitWeight	Litter birth weight
BirthLitWeightCount	Number of animals for the litter birth weight
BirthLoc1	Farrowing location level 1
BirthLoc2	Farrowing location level 2
BirthLocation	A location entered within 14 days before or after a farrowing

	event
BirthOrNurseDate	Farrowing date or nurse on date
CGLiveborn	Average adjusted liveborn litter size of the contemporary group
CGWeanWeight	Average adjusted litter weight of the contemporary group
ConceptDate	Date of conception service of the offspring or litter
CountAdjWeanWeight	Number of animals with adjusted weights
CountNurseAges	Number of nurse on events with recorded age
CountWeanWeight	Number of offspring or litters with weaning weights
EndLacDate	Ending lactation date. Date when lactation status changes to another status by a new event. It excludes a lactation initiated within the same parity if the inter-lactation period is more than 3 days, such as an Abortion event followed by a Nurse On event.
EndParityDate	End date of the parity. It can be empty, next farrowing date or removal date
FeedIn	Feed consumption during parity
FosterOff	Number of preweaned fostered off a lactating female with a foster event
FosterOn	Number of preweaned fostered on a lactating female with a foster event
FstHNSDate	Date of the first Heat Not Served event in the parity
FstServDate	First service date in the parity, after entry or after weaning
GestationDays	The number of days from a farrowing to the conception service in the previous parity
IID_BirthUserFields	Foreign key to user fields of farrowing event
IID_ConceptService	Foreign key to the conception service
IID_Female	Internal female ID
IID_FstService	Foreign key to the first service within the parity
IID_LstService	Foreign key to the last service within the parity
IID_LstTreatmentParity	Foreign key to the last treatment within the parity
IID_Parity	Internal parity ID
IID_PrevParity	Foreign key to previous parity

Induced	Induction Id
LactationFeedIn	Feed consumption during lactation
LactationLen	Lactation duration in days, counted from a farrowing event to the final wean or nurse off event
LitterId	Litter Id recorded for the farrowing
LittersWeaned	Number of litters weaned. Includes nurse litters weaned
Liveborn	Number born alive in a parity
LNurseOnDate	The date of the last Nurse On event in a parity
LstBirthDateLitter	Last litter birthdate, for natural litters is the same as BirthingDate. For nurse litters, it is the birthdate average
LstComment	Last comment
LWeanDate	Date of the last Wean event in the parity. A female with a Wean or Abortion event followed by a Nurse On event can have more than one Wean event in a parity
Mummies	Number of mummies born in a parity
NetAdded	The number of preweaned animals fostered on minus animals fostered off with a foster event
NetFostered	Animals fostered on with a foster event - animals fostered off with a foster event + animals nursed on with a nurse on event - animals nursed off with a nurse off event of females weaned in the period
NetFosterParity	Total net fosters, from foster and nurse events, counted at weaning, used to calculate pre-weaning mortality
NetNursed	The number of animals nursed on minus animals nursed off with a nurse event.
NextConceptDate	Conception date in the next parity
NServices	Number of services in the parity. If there are none, Nservices = 0
NursedWeaned	Total nursed and weaned. If there are no animals, its value is NULL.
NurseOff	Total preweaned nursed off in the parity with a nurse event
NurseOn	Total preweaned nursed on in the parity with a nurse event
Parity	Parity number
Parity4	Categorize the parity in 4 categories: 1, 2, 3, 4 or more

ParityLabels	'Labels assigned to parity separated by ;'
ParityPos	Record position in the parity table for each female
PrevEndLacDate	End date of lactation in the previous parity
PrevEndLacFstServ	Days from end of lactation to first service in the previous parity
PrevLactationLen	Days of lactation in the previous parity, counted from a farrowing event to the final wean or nurse off event
RecordedPwDeaths	Number of preweaned deaths recorded in PwDeath events
SPI	Sow Productivity Index
Stillborn	Number of stillborn in the parity
SumAdjLiveborn	Sum of adjusted liveborn litter size
SumAdjWeanWeight	Sum of litter weights at weaning for litters weaned in the parity. Includes nurse litters
SumNurseAges	Sum days of age of preweaned nursed on with a Nurse On event
SumWeanWeight	Sum of litter weights at weaning for litters weaned in the parity, includes nurse litters
TotalBorn	Number of total born in the parity, includes liveborn, stillborn, and mummies
TotalWeaned	Total weaned in current parity from Wean and Part-Wean events. Includes number weaned from Nurse litters
Wean1Age	Age of pigs at weaning for a female's birth litter.
Wean1Date	The weaning date of a female's birth litter
Wean1Num	Number weaned from a female's birth litter
WeanFstServ	Interval in days from wean to first service

16.4 Service

GestLoc1	Gestation location level 1
GestLoc2	Gestation location level 2
GestLocation	A location event recorded within 100 days after an Entry or Weaning event
ID	Female ID

IID_Female	Foreign key to related female
IID_LstHns	Foreign key to the last HNS event if the HNS result is this service
IID_LstTreatmentServ	Foreign key to last heat induction treatment before the service
IID_Nextparity	Foreign key to next parity
IID_Parity	Foreign key to related parity
IID_PrevService	Foreign key to prior service
IID_Service	Internal ID for this service
IID_ServMating1	Foreign key to first mating
IID_ServMating2	Foreign key to second mating
IID_ServMating3	Foreign key to third mating
Matings	Number of matings in a service
NService	Service number of the parity
ObservedHeat	Observed field in the last Heat Not Served event
Parity	Refers to a specific parity in the record of the female
PregDiagDate	Pregnancy diagnostic date in current service
PregDiagresult	Pregnancy diagnostic result in this service: 0 Negative, 1 Positive, 2 Inconclusive, 3 Observed Not Pregnant
PriorServInt	Interval in days from service to prior service within the same parity
PriorServResult	Prior service result. Same or different parity
ServBirthing	Numeric variable, used to calculate birthing rate in conjunction to AVG operator. 0 Service did not result in a birthing (repeat, remove, ...), 1 Service resulted in a birthing, NULL for unknown service results
ServConception	Numeric variable, used to calculate conception rate in conjunction to AVG operator. 0 Service did not result in a birthing (repeat, preg. check, ...), 1 Service resulted in a birthing. It excludes unknown results and removals
ServDate	Service date
ServGroupId	Group Id at the time of service. The Group event must be entered before the service date or on the same date as the first mating in the service
ServHour1	The hour of the first mating event in a service

ServHour2	The hour of the second mating event in a service
ServHour3	The hour of the third mating event in a service
ServLstDecimal1	User field Decimal1 of the lastest mating event
ServLstText1	User field Text1 of the lastest mating event
ServMale	The male used in a homospermic service (all matings per service with same male)
ServMale1	The male used in the first mating in a service
ServMale2	The male used in the second mating in a service
ServMale3	The male used in the third mating in service
ServMaleGenetics	Male genetics Id if the same genetics has been used in all matings per service.
ServResult	Service result: Returned to estrus, Negative pregnancy check, Found to be not-pregnant, Abortion, Farrowing, Unknown, the result has not yet been recorded, Death, Other removals
ServResultDate	Service result date
ServResultDays	Number of days from service to result of service, including days from service to not-pregnant, culling, death, or farrowing.
ServResultID	Numeric code of the service result. 0 Unknown, 1 ReturnedToEstrus, 2 NegativePregnancyCheck, 3 FoundNotPregnant, 4 Abortion, 5 Birthing, 6 Death, 7 OtherRemoval
ServTech	Technician Id if the same person has administered all matings per service
ServTech1	Technician Id in the first mating in a service
ServTech2	Technician Id in the second mating in a service
ServTech3	Technician Id in the third mating in a service
ServType	Type of service: A Artificial insemination, N Natural mating, C Combination matings, E Embryo transfer
LstTreatmentServ	Last treatment name with active service link within the parity and before the service

16.5 PwDeath

IID_FEMALE	Foreign key to related female
IID_PARITY	Foreign key to related parity

PwdComment	Comment entered in pre-weaned death event
PwdDate	Date of the pre-weaned death event
PwdDays	Days from the birthing event to death event, the first day is zero
PwdNumber	Number of pre-weaned deaths
PwdReason	Reason of death

16.6 Treatment

Application	Treatment application
Comment	Event comment
Description	Treatment description
Dosage	Drug dosage
IID_Master	Foreign key to related female, male or growing
IID_Parity	Foreign key to related parity (only females)
IID_Treatment	Internal ID for this treatment event
IID_Heat	Foreign key to related heat event for induced treatments (only females)
IsHeatInduction	The value is 1 if the treatment is for heat induction, 0 if it is not
Reason	Treatment reason
Receipt	Treatment receipt
Route	Drug route. 0-Intramuscular, 1-Oral, 2-Intravenous, 3-Sub-cutaneous
TreatDate	Date of the treatment event
TreatDays	Treatment days
TreatLocation	Location at treatment
TreatName	Treatment name
TreatTech	Treatment technician Id
Units	Treatment units
Withdrawal	Drug withdrawal days

WithdrawalDate	Drug withdrawal date
-----------------------	----------------------

16.7 Mating

Comment	Event comment
MatingHour	Mating hour
IID_FEMALE	Foreign key to related female
IID_LstTreatmentMating	Foreign key to last treatment within the parity
IID_Mating	Internal ID for this mating event
Male	Male Id or Semen Id
MatingDate	Date of the mating event
MatingType	Mating type: Natural, AI or Embrion
Tech	Technician Id
NMating	Number of mating within the service
IID_Service	Foreign key to the service record
Dose	Semen dose

16.8 GroupCohort

BeginInventory	Number of animals at begin period
EndInventory	Number of animals at end period
BeginWeight	Sum of live weights of animals at begin of period
EndWeight	Sum of live weights of animals at end of period
GroupDays	The sum of all active animal days during the period. An animal contributes one group day for each day it was active during the period
WeanedIn	Number of animals entered from the breeding stage
WeightWeanedIn	Total weight of animals entered from the breeding stage
Purchased	Animals purchased
WeightPurchased	Total weight of animals purchased
TransferredOut	Sum of number of animals transferred or moved out in period

WeightTransferredOut	Sum of weight of animals transferred or moved out in period
AnimalsStdSold	Sum of number of standard animals sold in period
WeightStdSold	Sum of weights of standard animals sold in period
IncomeStdSold	Sum of income from standard animals sold in period
AnimalsSold	Sum of number of all animals sold in period
WeightSold	Sum of weights of all animals sold out in period
IncomeSold	Sum of income from all animals sold in period
SSAnimalsSold	Sum of number of substandard animals sold in period
SSWeightSold	Sum of weights of substandard animals sold out in period
SSIncomeSold	Sum of income from substandard animals sold in period
RecordedDeaths	Sum of animal deaths recorded in period
WeightDeaths	Weight of animal deaths recorded in period
WeightFeedIn	Weight of feed disappearance in period
TransferredIn	Sum of number of animals transferred in in period. Includes move in and weaned in events.
TotalEntered	Sum of all animals Transferred In + Purchased
WeightTransferredIn	Sum of weight of animals transferred in in period
WeightTotalEntered	Weight of animals transferred in + weight of animals purchased
WeightInvDif	Ending weight of animals - beginning weight
GrossIncome	Gross income
FeedExpense	Total expense of feed disappearance in period
LaborExpense	Total labor expense
TotalExpense	Total production expense
GlobalFeedExpense	Total feed expense for the entire farm
GlobalLaborExpense	Total labor expense for the entire farm
GlobalTotalExpense	Total production expense for the entire farm
SumIndex	Sum of average indexes
SumFat	Sum of average back fat

SumLean	Sum of average percent lean
RowType	1 indicates that recordset is the summary, 0 means data
Week	Codified week number (year*100+week number)
PeriodDays	Period days
CountSoldIndex	Count of average indexes
CountSoldFat	Count of average back fat
CountSoldLean	Count of average percent lean

16.9 PCondition

PcDate	Event date
Comment	Event comment
IID_Master	Foreign key to related female, male or growing
IID_PCondition	Internal ID for this physical condition event
Score	Score
Weight	Weight
Height	Height
Girth	Girth
PcType	Physical condition type

16.10 GroupLot

Id	Group/Lot identification
Loc1	Location level 1
Loc2	Location level 2
Stage	Production stage

16.11 Performance

Abortions	The number of females with an abortion event in the period.
ArrivalEntryCount	Count of females with entry date within the period and with existing arrival date

ArrivalEntryInt	Sum of arrival to entry intervals in period
BirthBirthCount	Count of birthing intervals (see BirthBirthInt) This variable is used for statistical purposes.
BirthBirthInt	The sum of days between a birthing and the previous birthing (birthing interval) for all sows with a birthing event in the period and a previous birthing event in her record.
BirthFstServiceInt	The sum days from birth date to first service for unmated females with their first mating event in the service cohort.
BirthingConceptInt	Sum of days from farrowing to the conception service
Birthings	The number of birthing events in the period.
Birthings6	The number of birthing events =<6 born alive in the period.
BirthTotalWeaned	The sum of pigs weaned from females with birthing events in the period. Includes Weaning events of nurse litters. Pigs weaned with a Partial Weaning event are counted on the date of the following Weaning event
Born	The sum of total born to birthing events in the period.
BtFemalesWeaned	Number of females with farrowing event in the time period and have ended their lactation.
BtLivebornWeaned	The sum of born alive from birthing events in the period to females that have ended their lactation.
Conceptions	Number of conceptions
Conceptions1	The total number of conceptions for 1st services
CountBirthingFstServ	Count of days from birthing to first service, used for statistical purposes
CountBirthWeight	Sum of liveborn weights for litters with weights at farrowing
CountGestationLen	The count of gestation lengths in the period, used for statistical purposes.
CountWeanFstServ	Weaned females served 1st service
CountWeanLitterAges	Count of wean litters age for litters with weaning ages
CountWeanWeight	Number of animals weighed at weaning
Culled	The number of females removed in the period with a removal type of slaughtered
Deaths	The number of females removed in the period with a removal type of death
EndingFemaleInventory	The number of active females in inventory on the last day of the period.

EndingFemaleParity	Total of parities for all active females in inventory on the last day of the period
EndingMaleInventory	The number of breeding males in inventory on the last day of the period.
EndingUnmatedFemaleInventory	The number of unmated females in inventory on the last day of the period.
Entered	The number of females with an enter event in the period.
EntryAgeCount	The count of intervals from birthdate to entry with entry event in the period.
EntryAgeInt	The sum days from birthdate to entry date for females with an entry event in the period.
EntryFstServiceDays	The sum days from entry to first service for unmated females with their first mating event in the period.
EntryFstServiceInt	The sum days from entry to first service for unmated females with their first mating event in the service cohort.
EntryRemovalNotServedCount	The count of entry to removal intervals in not served females with removal date in the period.
EntryRemovalNotServedDays	The sum of entry to removal interval days in not served females in the period.
EntryRemovalNotServedInt	The sum of entry to removal intervals in not served females with removal date in the period.
FemaleDays	The sum of all active female days during the period. A female contributes one female day for each day she was active during the period, beginning at her entry date into the breeding herd and ending with her removal.
FemalesTransferredIn	Females transferred in the farm in the period. It includes females with Entry Date earlier than the transfer date
FemalesWeaned	The number of females with a last wean or nurse off event in the period.
FstServiceConceptDays	The sum days from first service to conception in the period.
FstServiceRemovalDays	The sum days from first service to removal in the period.
GestationDays	The sum of days of all females gestating in the period. A female contributes one gestation day for each day she is between conception and birthing in the period.
HeatConceptions	The total number of conceptions (positive pregnancy check) that return to heat. It includes services with ServResult R, O, or A
HeatNotServed	The number of Heat Not Served events in the period.

HNSUnmated	The number of Heat Not Served events to unmated females in the period.
HomospermicServices	The total number of homospermic services (all matings with same male).
LactatingDays	The sum days of all females lactating in the period. A female contributes one day for each day she was lactating during the period, beginning on the date of her farrow event and ending with the date of her last wean event.
LastWeaned	Total number of animals weaned from females with their last Weaning or Nurse Off event in the period,
LittersWeaned	The number of litters weaned in the period, includes litters weaned from a nurse on event.
Liveborn	The sum of born alive to all birthing events in the period.
LiveBornLitWeaned	The number of Liveborn for litters weaned or nursed off during the period
MatedFemaleDays	The sum of all mated female days. A breeding female is considered part of the mated breeding female inventory, effective on her first service date.
MultipleMatings	The number of services in the period with two or more matings per service.
Mummies	The sum of mummified animals born to all birthing events in the period.
NaturalLittersWeaned	The number of wean events in the period from a female's natural born litter, does not include wean events from nurse litters.
NaturalTotalWeaned	The sum of pigs weaned from females with Weaning events in the period, excludes Weaning events of nurse litters. Pigs weaned with a Partial Weaning event are counted on the date of the following Weaning event
NetFostered	Net fostered = pigs fostered on with a foster event - pigs fostered off with a foster event + pigs nursed on with a nurse on event - pigs nursed off with a nurse off event in the period.
NonProductiveDays	Total non-productive days in the period
NurseOff	The count of nurse off events in the period
NWeaned	Total pigs weaned from weaned and partial wean events in the period
P0Abortions	The number of parity 0 females with an abortion event in the period.
P0Conceptions	Number of conception services of parity 0 females
P0Conceptions1	The total number of conception services for 1st services in

	Parity 0 females.
P0CountAgeFstService	Count of parity 0 females with ages at first service
P0CountConceptionAges	Count of days of age at conception for females with their first birthing event in the period.
P0EndingFemaleInventory	The number of females in inventory on the last day of the period without a birthing event in their record.
P0FemaleDays	The sum of all female days during the period of females without a birthing event in their record.
P0FstServ	The number of entered Unmated Parity 0 females with a first mating event in the period.
P0FstServiceConceptDays	The sum of first service to conception interval days for parity 0 females with a conception service in the period.
P0FstServiceRemovalDays	The sum of first service to removal interval days for parity 0 females removed in the period.
P0HeatConceptions	The total number of conceptions (positive pregnancy check) that return to heat in nulliparas. It includes services with ServResult R, O, or A
P0PosPregResult	Number of parity 0 females with positive pregnancy checks events in the period
P0Services	The total number of parity 0 services in the period, includes repeat services.
P0Services1	The total number of 1st services in the period for parity 0 females
P0SumConceptionAges	The sum of days of age at conception for females with their first birthing event in the period.
P1Birthings	The number of birthings by first parity females in the period.
P1CountBirthingAges	Count of days of age at birthing of females with their first birthing event in the period.
P1FemaleDays	The sum of all female days in the period of females with one birthing event in their record.
P1SumBirthingAges	The sum of days of age at birthing of females with their first birthing event in the period.
PeriodDays	Period days
PluriparaDays	Period days
PosPregResult	Number of positive pregnancy checks events in the period.
RecordedPWDeaths	The sum of preweaned deaths recorded with the PwDeath event in the period.

Removed	The number of females removed in the period
RepeatServices	The number of repeat services in the period.
RowType	RowType
ServAbortions	The count of abortion events of females with a service date in the period.
ServAbortionsInt	The sum of days from service to abortion of females with a service date in the period.
ServBirthings	The number of birthing events resulting from service events in the period
ServBorn	The sum of total born to birthing events with service in the period
ServConception	Services with known conception result. It excludes unknown results and removals
ServDeaths	The number of females removed with a removal type of death with a service date in the period.
ServDeathsInt	The sum of days from service to death event of females with a service date in the period.
ServFoundOpen	The count of females observed not pregnant with a service date in the period.
ServFoundOpenInt	The sum of days from service to observed not pregnant of females with a service date in the period.
Services	The total number of services in the period. Includes repeat services.
Services1	The total number of 1st services in the period
Services7FromWean	The total number of services in the period served ≤ 7 days after weaning
ServicesAI	The total number of AI services in the period, includes repeat services.
ServicesNatural	The total number of natural mating services in the period, includes repeat services.
ServicesPeriodBirth	The number of females served to farrow in the period. Birthing rate= $\text{Birthings}/\text{ServicesPeriodBirth} * 100$
ServicesPeriodBirthAdj	The number of females served to farrow in the period excluding those that did not have an opportunity to farrow. Birthing rate= $\text{Birthings}/\text{ServicesPeriodBirthAdj} * 100$
ServLiveborn	The sum of born alive to all birthing events from females with a service date in the period

ServMatings	Matings with service in period.
ServPDNegative	The count of females with negative pregnancy diagnosis events with a service date in the period.
ServPDNegativeInt	The sum of days from service to negative pregnancy diagnosis of females with a service date in the period.
ServRemovals	The number of females removed that had a service date in the period.
ServRemovalsInt	The sum of days from service to removal event of females with a service date in the period.
ServRepeatInt	The sum of days from service to repeat service with a service date in the period.
ServRepeats	The sum of females that return to service with a service date in the period.
ServStillborn	The sum of stillborn pigs born to all birthing events with a service date in the period.
ServTotalWeaned	The sum of pigs weaned from females with a service date in the period
ServUnknownResult	The number of unknown service results with service in the period
Stillborn	The sum of stillborn pigs born to all birthing events in the period.
SumBirthingFstServ	The sum of days from birthing to first service for all females with their first service post weaning in the period.
SumBirthParity	The sum of parity numbers for females with a birthing event in the period.
SumBirthWeight	Sum of weights of litters at farrowing
SumGestationLen	The sum days of gestation lengths of females with a birthing event in the period.
Summary	1 indicates that record set is the summary, 0 means data
SumParityCulled	Sum of parities of culled females
SumWeanLitterAges	The sum of age at weaning for natural litters weaned in the period.
SumWeanWeight	The sum of litter weights at weaning for litters weaned in the parity. Includes nurse litters
TotalWeaned	The sum of pigs weaned from females with Weaning events in the period. Includes Weaning events of nurse litters. Pigs weaned with a Partial Weaning event are counted on the date of the following Weaning event

TransferredOut	The number of females removed in the period with a removal type of transferred
UnmatedFemaleDays	The sum of all female days during the period of females entered into the breeding herd but not yet mated.
WeanFstServ	The sum of days from the wean event to the first mating event for females with a first mating post weaning in the period.
WeanFstServDays	The sum of days from the wean event to the first mating event for females served in the period.
Weanings7Service	Number of wean and nurse off events in the period with a subsequent service ≤ 7 days
WeanRemovalNotServedDays	The sum of wean to removal interval days in not served females removed in the period.
Week	Codified week number (year*100+week number)

16.12 Comment

IID_FEMALE	Foreign key to related female
IID_PARITY	Foreign key to related parity
Comment	Comment
ComDate	Date of the comment event

16.13 Log

The Log table is used to track modifications in the database. It can be useful in multi-user environments. The table is called LOG.

LDATE	Date and time when the database has been modified.
LUSER	User name that has modified the database.
LTYPE	Operation type: <ul style="list-style-type: none"> 0: Add an event in animal file 1: Edit an event in animal file 2: Delete an event from animal file
LSUBTYPE	When LTYPE is 0, 1 or 2, LSUBTYPE is an event code. Each event has an internal code, for example 51 for Farrowing, 54 for artificial inseminations,
IDKEY	It is an internal reference to recover the event record in the database. It is for internal purposes.
DESCRIPTION	Brief description of the modification. It is usually the animal code or internal code, and the event date.

16.14 Expressions and functions

Porcitech allows you to use expressions and functions when you operate with variables.

CDDays(date)

Returns the number days from a date to today.

DateDiff(from, to)

Returns the difference in days between two dates.

DaysToText(days)

Returns the number of days in a readable text format. For example: 1 year 5 months 3 days.

DaysToShortTex(days)

Returns the number of days in an abbreviated readable text format. For example: 1Y 5M 3D.

Divz(dividend, divisor)

Returns the result of dividend/divisor. If the divisor is 0, then it returns a blank value.

FormatDate(date)

Formats the date according to the configuration of Porcitech. It includes serial dates, Gregorian, 14FEB12, etc.

IncMonth(date, months)

Returns a date increased by a specific number of months.

Percent(dividend, divisor)

Returns the percent result of dividend and divisor ($\text{dividend}/\text{divisor} \times 100$). If the divisor is 0, then it returns a blank value.

WeekNumber(date)

Returns the week number according to Porcitech configuration.

Top Level Intro

This page is printed before a new
top-level chapter starts

Part



17 Database conversion

17.1 Converting the database

Each software application needs specific steps to extract and prepare the data for conversion. Porcitech can import data from most software databases. Please contact Agritec for further information and format specifications or see the following topics. Once you have prepared the data, you must upload to our server at <http://agritecsoft.com/ags> to convert your former database to the Agritec format.

Steps:

1. Extract the data from your former application following the specific instructions.
2. Compress the data in a ZIP file. Select the files, right click, **Send To...**, **Compress folder**. DO NOT use RAR, LZ or other formats different than ZIP.
3. Using an Internet browser, open <http://import.agritecsoft.com/convert> address.
4. Enter your **invitation code**. If you do not have an invitation code, please contact Agritec to get one.
5. Enter your **E-mail**.
6. Select the software application that you have.
7. In **File** box, enter the path of the ZIP file that you have created.
8. Click **Upload**. Depending on the database and the Internet connection, this action can take several minutes. Please be patient.

The conversion usually can take up to 48 hours. When the new database is ready, you will receive a notification via e-mail with a link to download the new database.

The converted database is compressed in a ZIP file. Download and unzip it to your hard disk. Finally, use the Database restore option of Porcitech to add it into the Database Management system:

To restore the converted database

1. Click the link in the notification e-mail to download the converted database to your computer.
2. Select **Open** to open the ZIP file. In some Operating Systems, you first need to save it in your hard disk and then open it.
3. Unzip the compressed file to your hard disk (the Desktop might be a good place)
4. Execute Porcitech, click **File** and then **Restore**.
5. Click the button of **Get Backup From** box and select the above file.
6. Click **Ok**.

17.2 Import from PigChamp

PigChamp data files can easily be converted to Porcitech. To create a batch file of your data to send to Agritec for conversion, follow the instructions below:

Note about data integrity:

Please run Pigchamp's Data Integrity Report and fix any errors that are important to you before you submit your database to Agritec for conversion. If you choose not to do this, data integrity errors will be

ignored (for example a service before a weaning).

Note to herds using 1000-day format:

Before creating your Batch file, you must convert your 1000-day date format to Month-Day format.

To change the date format in PigChamp for DOS:

1. Go to Setup
2. Go to Screen Options
3. Select Date Format = Month-Day

Note for users of PigChamp versions 2.2

First you must update your PigChamp database to PigChamp 4.0 before it can be converted to Agritec. You will need PigChamp 4.0 or higher. There is a utility called "Convert PigChamp 2.2" in the Utilities menu. This converts 2.2 to 4.x and then you can create the batch file that you need.

Note for users with a non english version of PigChamp (spanish, french, ...)

The conversor is designed to import english batch files. Before to generate the PigChamp reports, it is absolutely necessary that you change temporally the language of your PigChamp.

1. Go to Setup
2. Go to Screen Options
3. Select English in Language option

1- Breeding data

To create a Batch file in PigChamp for DOS:

For Sow/Boar Records

1. Go to Reports
2. Go to Breeding Herd Reports
3. Go to History
4. Answer the series of 5 questions as follows:
 - o History beginning date? -> BEGINNING
 - o History ending date? -> END
 - o Selection method? -> ALL
 - o Output format? -> BATCH
 - o Output device? -> ASCII
 - o Name your file as BREEDING.TXT
 - o This file will now be saved in the same directory as your Pigchamp program.
5. If you do not have growing files to submit with this farm, compress BREEDING.TXT into one .zip

file PER FARM using WinZip or another file compression utility. Then upload this zip file to the Agritec Server for conversion. See Converting the database topic. If you have growing data file to include with this farm please see the next section.

The text file created must look as follows:

```
6425A; HEADER; ; TG; ; ; ;
6425A; HEADER2; ; 0.00; 0.0; ; ; ; ;
6425A; 31MAY01; ENTER; FEMALE; 0; YES
6425A; 31MAY01; AI; C1216; ; 0
6425A; 22SEP01; FARROW; 11; 0; 2; ; ; ;
6425A; 09OCT01; WEAN; 9;
6425A; 15OCT01; AI; C1354; ; 0
```

2- Growing data

For growing data, the procedure is similar:

- 1.Go to Reports
- 2.Go to Growth Reports
- 3.Go to History
- 4.In the history screen, select:
 - History type: select LOCATION for dynamic systems or GROUP for static systems.
 - History beginning date? -> BEGINNING
 - History ending date? -> END
 - Selection method? -> ALL
 - Output format? ->BATCH
 - Output device? -> ASCII
 - Name your file as STATIC.TXT for the Group data, and DYNAMIC.TXT for the Location data. These files will now be saved in the same directory as your Pigchamp program.

Important: The filter automatically assigns the FEED account to feed events, and SALES account to sales events from PigChamp. Porcitech needs to relate purchases or sales with financial accounts. So if you use sales or feed events, then you need to go to Porcitech **Options | Accounts** and define 2 accounts: FEED for feed expenses, and SALES for pig sales. Otherwise growing performance reports will not show feed expenses or sales.

3- Send the data

Compress all farm files (BREEDING.TXT, DYNAMIC.TXT, STATIC.TXT) together into ONE .zip file PER FARM using WinZip or another file compression utility. Then upload this zip file to the Agritec Server to for conversion. See Converting the database topic.

17.3 Import from PigWin

Important note: This article is for the original PigWin version 2.5 or lower. Agrovision, a Dutch company, purchased PigWin rights in America in September 2005 and is selling PigManager under the PigWin name. If you are using PigWin 'Agrovision powered', please see Import from PigManager.

PigWin uses a database called Paradox which is composed of several files. You must compact them and send them to Agritec Software.

1. Search for the database folder. Go to **Windows | Search** and enter **SHISTORY.DB**. Click **Ok** and you will see the folder where this file is located. Other files that you can find in this folder are: SOWS.DB, MATES.DB or FARRS.DB.
2. Compact the **entire** folder using Winzip or any other similar tools. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
3. Use the Agritec Services to get the new database. See Converting the database topic.

17.4 Import from SwineBooks

SwineBooks uses a database called Microsoft SQL Server which is composed of two files.

1. Compact your database using Winzip or any other similar zip tool. If you use Windows XP or Vista, you can simply click on this file using the right button of the mouse and you will see a list of options to compress the folder. The database usually is located at **C:\Program Files\SwineBooks Pro** directory. Search the file for the farm name. You will find 2 files with the same name, usually something like MyFarm.swpo and MyFarm_log.ldf.
2. Use the Agritec Services to get your new database. See Converting the database topic.

17.5 Import from Herdsman

Herdsman uses a database called Microsoft SQL Server which is composed of two files.

1. Search for the database file. The database has extension "Herdsman". For example "MyFarm.Herdsman".
2. Compact the database using Winzip or any other similar tools. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
3. Use the Agritec Services to get the new database. See Converting the database topic.

17.6 Import from Farm (Windows)

FARM for Windows is manufactured in the Netherlands. It uses a database called Sybase Anywhere 9.0. To export data from the FARM, follow the instructions below:

1. Start FARM software
2. Execute the following reports, saving them to Excel format with the following names:
 - "Purchased Sows Report" saved as "sows.xls"
 - "Data validation parity/farrowings" saved as "farrowings.xls"
 - "Data validation parity/matings" saved as "matings.xls"
 - "Sows Sold Report" saved as "sows_slaughtered.xls"

- "Sows Death report" saved as "sows_deaths.xls"
- "Prewaning Mortality Report" as "pwmortality.xls"

3. Using Microsoft Excel, you must edit each report file and delete the first rows that show the report header. The first row must be the column header (ID, Parity, ...)
4. Using Microsoft Excel, edit each report file and delete the report footer (subtotals, labels, ...)
5. Compact the above files in a zip file.
6. Use the Agritec Services to get the new database. See Converting the database topic.

17.7 Import from PigCare

The initial version of PigCare was owned by PIC and uses a database called Paradox which is composed of several files. You must compact them and send them to Agritec Software.

See PigCare 3000 if you have purchased PigCare later than 2005.

1. Search for the database folder. Go to **Windows | Search** and enter **EVENTS.DBF**. Click **Ok** and you will see the folder where this file is located. Other files in this folder are: BOAR.DBF or SOW.DBF.
2. Compact the entire folder using Winzip or any other similar tools. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
3. Use the Agritec Services to get the new database. See Converting the database topic.

17.8 Import from PigCare 3000

To export data from the PigCHAMP Care 3000 program, follow the instructions below:

1. Click on the **File Menu**
2. Select **Export**. A menu will appear to the right
3. Select **PigCHAMP Farm Data File (*.pcf3)** (It is pcf4 in some versions)
4. Select the location in which to save the file.
5. Compact the above pcf3 or pcf4 file using Winzip or any other similar tools. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
6. Use the Agritec Services to get the new database. See Converting the database topic.

17.9 Import from PigManager

To export data from the PigManager, follow the instructions below:

1. Do a backup from PigManager program and save it in a well known place. The backup file has BDR extension, for example 0456463MYFARM[2009_8_8][09_01_11].BDR
2. Compact the above backup file file using Winzip or any other similar tool. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
3. Use the Agritec Services to get the new database. See Converting the database topic.

If the PigManager license has expired and you cannot do a backup, an alternative method can be used:

PigManager uses a database called Paradox which is composed of several files. You must compact them and send them to Agritec Software.

1. Search for the database folder. You can find it usually at **C:\Program Files\PigManager\Ibms\Bd\<Farm ID>** where *<Farm ID>* is the name or number of the farm, for example C:\Program Files\PigManager\Ibms\Bd\00001. If you cannot find it, go to **Windows | Search** and enter **BASISVKN**. Click **Ok** and you will see the folder where this file is located.
2. Compact the entire folder using Winzip or any other similar tool. If you use Windows XP or Vista, you can simply click on this folder using the right button of the mouse and you will see a list of options to compress the folder.
3. Use the Agritec Services to get the new database. See Converting the database topic.

17.10 Import from PigKnows

You will need to create 2 files, one for active (OnFarm) females, and another for removed females.

1. Open the PigKnows session using your PigKnows login and password.
2. Go to the Main Menu and click Sow History
3. Select the desired farm
4. The Sow ID field must be empty
5. Select PSTATUS=OnFarm, Gline= ALL, Parity=ALL, Report format=Batch, Date format=mm/dd/yy, Output format=txt. Accept the default in the remaining fields
6. Click SUBMIT button
7. The web browser will show the animal data. Right click and select Save Page As...
8. Select Text (txt) format in the Type drop down box
9. Enter a name, for example onfarm.txt and select a folder to save it. The desktop is a good place. Click Ok
10. Repeat the above steps but at PSTATUS field select "Removed" and create another file. Save this file with a different file name, for example removed.txt
11. Zip the two files, onfarm.txt and removed.txt, together into one zip file.
12. Use the Agritec Services to upload this zip file for conversion to your new database. See Converting the database topic.

17.11 Import from WinPig

To export data from WinPig (Agrosoft), follow the instructions below:

1. Install PDF Creator in your computer or another PDF printer driver. You can download it from <http://sourceforge.net/projects/pdfcreator/>
2. Set the default printer to PDF Creator or other PDF driver. This must be done before opening WinPig
3. Open WinPig
4. Click the **Setup** menu button. Go to the **Register** tab and select the **Auto Option** tab on the right side of the window. Make sure the **1000 Day System** option is not checked. Dates must be in ddmmyy format. Click **OK**.
5. Select the **Print** menu button. Enter the from and to dates in the Period fields. Make sure no other

filters are active. Click **OK**. **Do not preview** the report because WinPig will limit the number of pages to 100 that can be printed to screen. You must print directly to the PDF driver.

6. You will be asked to save your PDF document. Select a location to save it and change the name of the file to **Farrowed.pdf** (default file name is Registration of sows _ Farrowed.pdf).
7. Follow these same steps for each of the registrations under the **Sows** menu item: Entered, Farrowed, Medicine, Removed, Served, SuppReg, Weaned
8. Convert the above pdf files to Excel files. See bottom part of this topic.
9. Compact the xls files together in one zip file using WinZip or another zip utility.
10. Use the Agritec Services to upload this file. See Converting the database topic.

How to convert PDF files to Excel files

There are many programs to convert PDF files to Excel files. You can use what you prefer. This topic describes the steps using "PDF Converter Professional 7", from Nuance company.

1. Purchase **PDF Converter Professional 7** or download the free trial from <http://www.nuance.com/products/pdf-converter-professional7>
2. Install it in your PC
3. Execute **PDF Converter Assistant**
4. Click **File** and then **Open**. Select all PDF files generated from WinPig
5. Select **Spreadsheet** in **Options** menu
6. Select **Excel Workbook** in **Options** menu
7. Click **All Files** in **Convert** menu

At this point, the Excel files have been created. They need a little arrangement before they are ready for the Agritec Software filter. Using Microsoft Excel, Calc, or any other XLS editor, open each Excel file and remove all rows above the first column header. These are usually the first 16 rows of each Excel document. The subsequent headers and footers that the PDF converter includes for each PDF page are automatically excluded by the filter.

17.12 Import fom PigTales

1. Execute Pigtales and open the farm database
2. From main menu, go to Management / Data Import-Export / Export Data
3. In File Type, select **Generic Transactions**
4. Enter the file name, for example **C:\MiDatabase.txt**
5. Use the Agritec Services to get the new database. See Converting the database topic.

Top Level Intro

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Part



18 Importing and exporting data

18.1 Export animals to another Agritec database

You can create an XML file of a selection of animal histories to export from a donating farm database to import into a recipient database. This may include breeding females, males, and individuals. This procedure is commonly used to transfer animals from one farm to another.

Warning!: This feature irreversibly modifies the farm history in both databases. Always create a backup of your databases before using this procedure.

1. Open the donating database.
2. Click **Farm** in the main menu
3. Click **Export Females to Another Database**.

The export dialog will appear:

Animal IDs for exporting

Click the **Select Animals** button to add animal IDs.

- Select **ID/Code** filter if you want to type individual animal IDs. Type the IDs directly into the **Value** box, separated with a space. If you have a list of the female IDs in a Excel document, you can select the Excel column, then copy and paste them directly into the Value box in one step.
- Another option is to select a block of animals by using a filter such as current status or arrival date.

Export options:

It is very important to consider when choosing one of these options how it will affect your farm database and reporting. Transferring breeding females from one database to another, especially if they have been bred on the donating farm, will affect farrowing rate and other important variables on both farms.

- **Move history from a database to another database**

This option deletes the entire history in the donor database and copies it to the recipient database. Because animals are removed from the database, any historical performance reports will be missing all events from these animals. This option is only recommended if the donor farm will be discontinued or is not significant to your production system. All historical events that occurred in the donor farm will be added to the recipient farm and will be included in reports as if they occurred there.

- **Duplicate history in both databases**

This option does not delete the history in the current database. It will copy the entire history of the animal to the recipient database. All historical events that occurred in the donor farm will be added to the recipient farm and will be included in reports as if they occurred there.

- **Continue history in the new database**

The history record ends in the donor farm with a removal event added to the record on the date of the transfer, and is continued in the recipient database from the **Arrival** (transfer) date. The history in the donor database is not deleted, instead the animal is removed. The entire history of events is added to the new database for reference purposes, but events that occurred before the Arrival (transfer) date are not included in most reports. Prior events will appear in gray color in the Female File, indicating that they occurred in another farm database. **Transfer Date**, **Removal Reason** and **Comment** fields are asked when selecting this export option.

Important: You must choose the **Arrival Date** (transfer date) given to the animal in the recipient farm. All animal events **equal to or after the Arrival Date** will be counted as if they occurred in the recipient farm. For example, if you transfer females of weaned status and do not want their wean event to be counted in the recipient farm, choose an Arrival Date later than the weaning date.

Exported animals will be automatically placed in **Batch Entry, Removal event** in the donor farm. You must go to Event Entry, Batch, Removal event, and process these events to add a removal event to the animals in the donor farm.

Transfer Individual directly to Breeding Herd

If this checkbox is on and the exported animal is in the Individual file, it is automatically moved to the Breeding Herd in the donor farm and given an Entry date.

Xml File

Enter the name and path of the XML file and save it. This file will be used to import the females into the recipient database. The **OK** button creates the file on your computer. This file can also be copied to a USB memory stick or sent by email.

See also:

Import females from another Agritec database

18.2 Import animals from another Agritec database

1. Open the recipient database.
2. Click **Farm** menu, **Import Data**.
3. Select the XML file you created.
4. Select **Agritec XML format file** and click OK.
5. Go to **Options menu/On Off** and remove the check mark from **Entry date cannot be earlier than Arrival date**.
6. Click **Farm** and then **Pending Processing** in main menu.
7. Check off **Stop If Discrepancy** in Batch before processing, or go to Options / On-Off and check off the **Show Alert if wean discrepancy**.
8. Click the **Process** button to add the female events to the database.

See also:

Export females to another Agritec database

18.3 Merge females from different databases

Merging females from two databases is useful when you want to consolidate multiple farms into one unique database.

CAUTION!: Make sure you have backed up all farm databases before merging. There is risk to corrupting the database if you do not follow the procedure correctly.

NOTE: In some cases you must re-assign female IDs if they are duplicated in another database. For this purpose you can use Modify female block

1. Open the donating database.
2. If there are duplicate female IDs, click **File** and then **Modify Female Block**. Change the female IDs that are duplicated with the main database.
3. In main menu, click **Farm** and then **Export Females to Another Database**.
4. Enter the file name to export in **Xml File** box and click **OK**.
5. Open the receiving database.
6. Click **Farm, Import Data** and select **Agritech XML format**.
7. Select the file to import in **Select the File to import** box and click **OK**.
8. Go to **Batch Event Entry** and click **Process** button.
9. Go to step 1 for each database to merge.

18.4 Import weights

Porcitech can import weights from an external text file. The format of the text file is defined in the following table:

File format: Text file separated by semi-colon (;)

Position	Value
1	Database alias (empty means the current farm)
2	Date
3	Animal ID
4	Weight

The text file must be like:

```
;02/07/10;664;45.33
;03/12/10;3434;50.12
```

In the above example, the line 1 denotes:

Database: default (it is empty)
Date: 2/7/2010
Animal ID: 664
Weight: 45.33

To import the data:

1. Click **Farm** and then **Pending Processing Event** in the main menu
2. Click **Fill-In**
3. Under **Import From External Files**, click **Import**
4. Select the file to import
5. Select **Weight Control** and click **OK**

6. You will see the imported data in the grid. Click **Process** button to process the data.

See Also:

Using MS Excel to prepare data

18.5 Import prospective breeding animals

Porcitech can import data from an external file and add new animals to the pig file.

The selection of prospective breeding animals from a litter may be carried out using farm specific criteria. The user may have a list of animals recorded in an external file and wish to add them into the Porcitech database. The data can be from the same farm or from another farm.

File format: Text file separated by semi-colon (;)

Position	Value
1	Dam ID
2	Litter ID
3	Birth date in yyyy/mm/dd or Porcitech format
4	Sire ID
5	Sex (0-female, 1-male)
6	Genetics
7	Id Prefix
8	pig Id, multiple Ids must be separated by comma

The text file must be like:

```
P123;L123;2006/12/1;SI23;0;LW;PR;3,5
Q33;L123;2006/12/3;232;1;LW;PR;6
```

In the above example, the line 1 denotes:

Dam ID: P123
 Litter ID: L123
 Birth date: 2006/12/1
 Sire ID: SI23
 Sex: Female
 pig IDs: PR3 and PR5

Porcitech by default uses the data extracted from the database according to the Litter ID, however the data provided by the file has prevalence over the litter related data.

To import the data:

1. Click Farm and then **Pending Processing Event** in the main menu
2. Click **Fill-In**

3. Under **Import From External Files**, click **Import**
4. Select the file to import
5. Select **Offspring Entry** and click **OK**
6. You will see the imported data in the grid. Click **Process** button to process the data.

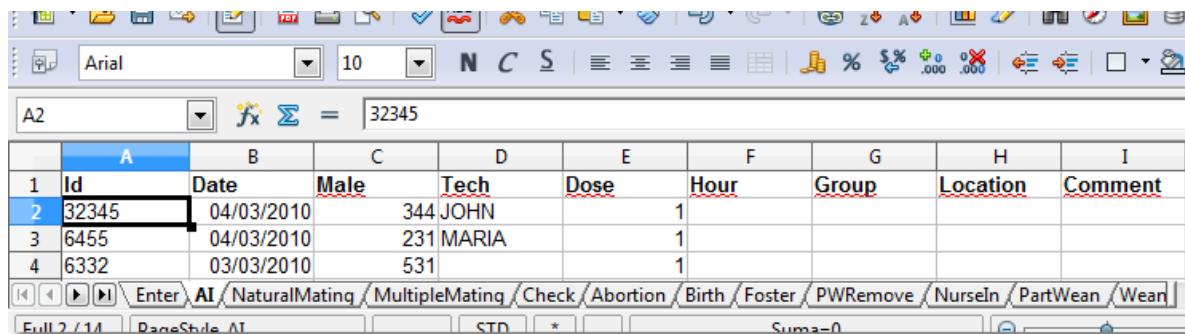
See Also:

Using MS Excel to prepare data.

18.6 Import multiple events from Agritec Excel format

Porcitech can import data from a Microsoft Excel document. This format is Agritec-specific based on Excel sheets and Excel named columns. The document contains sheets, each sheet contains a list of related fields in an event. The name of the sheet defines the type of event. The name of columns defines fields. An Excel document can contain most events (inseminations, weight controls, weanings, etc.)

This feature is only valid for Enterprise edition.



	A	B	C	D	E	F	G	H	I
1	<u>Id</u>	<u>Date</u>	<u>Male</u>	<u>Tech</u>	<u>Dose</u>	<u>Hour</u>	<u>Group</u>	<u>Location</u>	<u>Comment</u>
2	32345	04/03/2010	344	JOHN		1			
3	6455	04/03/2010	231	MARIA		1			
4	6332	03/03/2010	531			1			

The above bitmap shows the AI (Artificial Insemination) sheet. Note that you cannot change the sheet name since it is used by Porcitech to identify the event type. Each column has a header defining the field, in this case ID (female ID), date (insemination date), Male (male used in the insemination), etc.

Download the Excel file template from [here](#).


See Agritec Import Format document for details about field names.

Instructions to import data from the Excel document to Porcitech:

1. Click **Farm** menu, **Import Data**.
2. Select the Excel file you created.
3. Select **Agritec Excel format file** and click OK.

Important notes:

- Due to a Microsoft Excel limitation, the maximum number of rows is 65536.
- The columns with dates must be Date formatted.

- If the date is in serial format, then the cells must have Number format. It is not enough to change the format to number. If you see the Error Button  near the cells, it means that the number was saved as text. Select the entire column, then click the Error Button and then click Convert to numbers. See <http://support.microsoft.com/kb/291047>

18.7 Import multiple events from text files

Porcitech can import data from a text file, specifically CSV format. In this format, each event type is a different text file, and each row is an event. The first row is the header and defines the column names.

The file can be created or modified with any editor like Notepad or similar. It should look something like this:

```
ID;DATE;MALE
B344;01/12/02;MALE1
7754;01/12/02;MALE2
3474;01/12/02;MALE5
```

In the above example, the file is saved with AI.CSV name and it is the insemination event.

The name of the columns are defined at http://agritecsoft.com/kb_import/technical_specifications.htm

If you use user fields, you should not use the custom names. Instead, use the native names: TEXT1, TEXT2, ... DECIMAL1, DECIMAL2, ..., DATETIME1,..., BOOL1,...

Excel format is commonly used instead of CSV, but CSV has advantages in some scenarios:

- CSV format allows you to load unlimited number of rows while Excel limit is 65536 rows
- Some electronic devices (weighing machines, pregnancy checkers, ...) directly create CSV files
- Some external software programs create CSV files to exchange information (bookkeeping, ERP, BLUP systems, ...)

To import the data:

1. Click Farm and then **Pending Processing Event** in the main menu
2. Click **Fill-In**
3. Under **Import From External Files**, click **Import**
4. Enter the directory where the CSV files are. Do not select a single CSV file, you must enter the directory path.
5. Select **Agritech CSV Batch Files** and click **OK**
6. You will see the imported data in the grid in batch data entry screen. Click **Process** button to process the data.

18.8 Using MS Excel to prepare data for import

Microsoft Excel is an excellent tool for preparing data to be imported into Porcitech. Using MS Excel, you can import data from most common formats: DBase, Xml, text, Access, etc.

Once you have read the data using MS Excel, you must rearrange the columns and format according to the Porcitech filter specification. Most Porcitech filters work by importing the text format file with ; as separator list. For example:

1. Open **Microsoft Excel**
2. Click **Open** and select the format of your data in **File Type**
3. Select the file and click **Ok**
4. If necessary, modify your sheet by hiding columns (click right button and Hide) or altering their order to comply with Porcitech filter specifications.
5. Click **File, Save As**.
6. In **Save As Type**, select **CSV (commas separated variables) (*.csv)**.
7. Enter a file name and click **Save**.

The file generated is text type, and can be modified with any editor like Notepad or similar. It should look something like this:

```
FARM1;01/12/02;230;1;20.4;3.78;3.44;199
FARM1;01/12/02;244;1;30.3;3.68;3.12;281
IOWA;01/12/02;BLACK;1;22.1;3.16;369
```

Notice that each field is separated by a semi-colon (;). If you do not see a semi-colon, you should replace the character using the corresponding editor option or modify the **Regional Configuration** of Windows, **List Separator**.

18.9 Using MS Access to prepare data for import

Microsoft Access is an excellent tool for preparing data to be imported into Porcitech. Using MS Access, you can import data from most common databases using the ODBC connector.

You must create consults selecting the desired columns according to the Porcitech filter specification. Please contact Agritec to get the filter specification document. Once you have created the consults, you must export the consults to CSV format:

1. Open **Microsoft Access**
2. Open the Access consult that you want to export
3. Click **File** and then **Export**
4. In **Save As Type**, select **CSV (commas separated variables) (*.csv)**
5. Enter a file name and click **Export**
6. Click **Next**
7. Select **Semicolon** as delimiter
8. Select **None** in **Text Qualifier box**
9. Check on the **First Row Contains Field Names** box

10. Click **Next** and click **Finish**

The file generated is text type, and can be modified with any editor like Notepad or similar. It should look something like this:

```
ID;DATE;MALE
B344;01/12/02;MALE1
7754;01/12/02;MALE2
3474;01/12/02;MALE5
```

18.10 ERP integration

Enterprise resource planning (ERP) is an integrated computer-based system used to manage internal and external resources including tangible assets, financial resources, materials, and human resources. It is commonly used in companies with a medium-high size. Usually these companies manage the invoices from this ERP for their accounting management. Porcitech cannot replace these ERPs since Porcitech is focused mainly to production and the ERP is the best option to continue managing the accounting.

When the company receives income for animal selling, or invoices for feed, vet services, etc, this data is entered in the ERP. In parallel, it is necessary to enter the same data in Porcitech if you want to control the Group/Lot inventory, income, expenses, and production measurements. The data can be entered from the data entry option but it is more efficient to use the filters to automatically import the data generated by the ERP to avoid the double entry task.

The ERP software needs to offer the capability to export to CSV format. Then you can use the Farm / Import Data option of Porcitech to import the generated data.

There are 4 data types to be imported from the ERP:

- 1.Group/Lot Purchases. See Financial/Production events
- 2.Group/Lot Sales. See Financial/Production events
- 3.Feed In. See Financial/Production events
- 4.Incomes and Expenses. See Financial events

Group/Lot Purchases, Sales, and Feed In data is imported from named files to Batch, using the Farm / Import Data / Agritech Batch CSV files option. These files need to use a specific name file and be placed in a folder before they can be imported.

Income and Expense data is imported from Farm / Import Data / Financial Sales and Financial Purchases options. This file can use any file name.

18.11 Extracting Porcitech data using MS Access

First of all, you need to create a ODBC connection. Please see Create a ODBC connection

1. Create a blank database with MS Access.
2. Click **File, Get External Data** and then **Link Tables**.
3. In **File Type**, select **ODBC**.
4. Click **Computer Data Origin** sheet.
5. Select **My Agritec Database**.
6. Select the tables that you want to manage, usually FEMALEEX, PARITYEX, SERVICEEX, SERVICERESULT, TREATMENTEX and PWDEATHEX.

18.12 Create a ODBC connection

Download the ODBC connector from:

Windows 32 bit: http://agritecsoft.com/files/extern/Firebird_ODBC_2.0.1.152_Win32.exe

Windows 64 bit: http://agritecsoft.com/files/extern/Firebird_ODBC_2.0.1.152_x64.exe

or you can use the Firebird page at <http://www.firebirdsql.org/en/odbc-driver>

If you use Windows 64 bit, you also need to download the fbclient.dll file from <http://agritecsoft.com/files/extern/fbclient.dll> since ODBC drivers needs 64 bit client library and Porcitech uses 32 bit.

Execute the installation. Then define the connection:

1. Start ODBC Data Source Administrator from the Control Panel
2. Select the Drivers tab and ensure that Firebird driver is listed among available drivers
3. Select either System DSN or User DSN and click Add button
4. Select Firebird driver and click Finish
5. The next screen prompts you to enter Firebird-specific details and is shown below.

6. Click Ok

Data Source Name: Unique name of Server Type Example: "My FB connection"

Database: Specify the location of a database, locally or remotely. Example: "C:\MYFARM.FDB" or "MYSERVER/3050:E:\BD\ZIMMERMAN.FDB"

Client: Leave this blank. If you use Windows 64 bit, specify the location of the fbclient.dll 64 bit that you have previously downloaded

Database Account: This is the login Id. Try using SYSDBA, which is a pre-built account that comes with Firebird

Password: The default password for SYSDBA is masterkey

Role: Leave this blank, particularly if you are using the SYSDBA account.

If you get "Unable to connect to data source library gds32.dll failed to load" message, then you must copy fbclient.dll file to the Windows System directory, renaming it to gds32.dll.

18.13 Export data to genetic supplier

If you supply animals to a genetic supplier company, you can also export the animal data in Dbase format. The exported data are necessary for companies that use the BLUP model (Best Linear Unbiased Prediction). This model produces a numerical index for each animal, based on several factors such as genealogy, reproductive data like total born, live born, etc.

Fields of exported table:

TRSFDATE	Enter date of breeding animal, empty if not selected
NEWID	Breeding animal Id, empty if not selected
OLDID	Initial Id of animal
BIRTHDATE	Birthdate
GENETICS	Genetics
DAM	Dam Id
SIRE	Sire Id
LITTERID	Litter Id
SEX	Animal sex, 0 for female, 1 for male

See also:

[Individual Pig Records](#)

[Transfer to breeding herd](#)

Top Level Intro

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Part



19 Database consults

19.1 Database consults

Porcitech includes a set of powerful tools to analyze the data. Often the same question can be solved using one or more types of the **Report Designer**. For example, the number of females removed by removal reason is a distribution. We can use the Histogram, List Data, or Query report designers. All reports show the same results.

All report designers use the variable system, see Agritec Variable Dictionary. The variables are defined in this document. Additionally you can create new variables from the existing ones using mathematical expressions or functions.

This chapter will serve as a basic tutorial for using the database tools included in Porcitech. It has been designed like a forum, you will find dozens of questions that Porcitech users have sent us and the corresponding solutions. We try to show how to solve questions using the several types of report designer, however you may use the one most comfortable for you.

If you have new scenarios or consults, please send us the questions.

Note: For most common list-type reports you do not need to use the Database Consults. The same results can be achieved using the Basic Customization feature in an easier way. Use Database Consults to get advanced reports if Basic Customization cannot create.

See also:

Basic Customization

19.2 Breeding herd consults

19.2.1 Lists

19.2.1.1 Active unmated breeding females

I would like to create a list of all active unmated breeding females in my herd.

Use Query report designer. The setup screen is shown below:

Tables: FEMALEEX

Columns: ID, ENTRYDATE

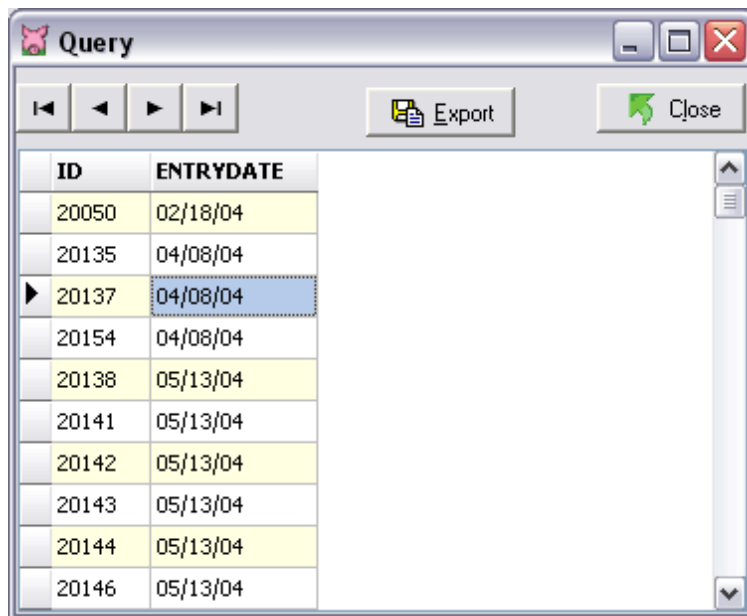
Criteria: ISACTIVE=1 AND STATUSCODE='E'

Sorting: ENTRYDATE, ID

Or you can use SQL directly:

```
SELECT ID, ENTRYDATE FROM FEMALEEX  
WHERE ISACTIVE=1 AND STATUSCODE='E'  
ORDER BY ENTRYDATE, ID
```

The Query report is shown below:



ID	ENTRYDATE
20050	02/18/04
20135	04/08/04
20137	04/08/04
20154	04/08/04
20138	05/13/04
20141	05/13/04
20142	05/13/04
20143	05/13/04
20144	05/13/04
20146	05/13/04

19.2.1.2 Service list between 2 dates

I would like to create a list of all service within year and to see the parity related data as birth location, wean date, total weaned, days lactating, service date, service male and service result.

Use Query report designer. The setup screen is shown below:

Tables: SERVICEEX

Columns: ID, PARITY, BIRTHLOCATION, ENDLACDATE, TOTALWEANED,
ENDLACDATE-BIRTHINGDATE: DAYS_LAC (Calculation), SERVDATE, SERVMale,
SERVRESULT

Criteria: SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'

Sorting: SERVDATE, ID

Or you can use SQL directly:

```
SELECT ID, PARITY, BIRTHLOCATION, ENDLACDATE, TOTALWEANED, ENDLACDATE-  
BIRTHINGDATE AS DAYS_LAC, SERVDATE, SERVMale, SERVRESULT  
FROM SERVICEEX  
WHERE SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'  
ORDER BY SERVDATE, ID
```

19.2.1.3 Service result between 2 dates

I would like to create a list of all service results within year, displaying service date, service result and to see the next parity data as parity number, birth location, birth date and total born.

Use Query report designer. The setup screen is shown below:

Tables: SERVICEEX

Columns: ID, SERVDATE, SERVRESULT, SERVRESULTDAYS, BIRTHINGDATE, PARITY, BIRTHLOCATION, TOTALBORN

Criteria: SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'

Sorting: SERVDATE, ID

Or you can use SQL directly:

```
SELECT ID, SERVDATE, SERVRESULT, SERVRESULTDAYS, BIRTHINGDATE, PARITY,
BIRTHLOCATION, TOTALBORN
FROM SERVICERESULT
WHERE SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'
ORDER BY SERVDATE, ID
```

19.2.1.4 Inconclusive pregnancy diagnosis list

Occasionally mated females are later found to act in heat but will not stand for a mating. In this case we are not sure if the female has actually returned to heat or is in fact pregnant. I would like to flag these problematic females and then print a list with their service date and the days from service to the observation so their pregnancy state can be monitored.

For this scenario, you should use the **Pregnancy Diagnosis** event and check the "Not conclusive" option. Then you can list the problematic sows using a filter for females whose pregnancy diagnosis is not conclusive. You want to list only females in the current parity who have been served but not yet farrowed.

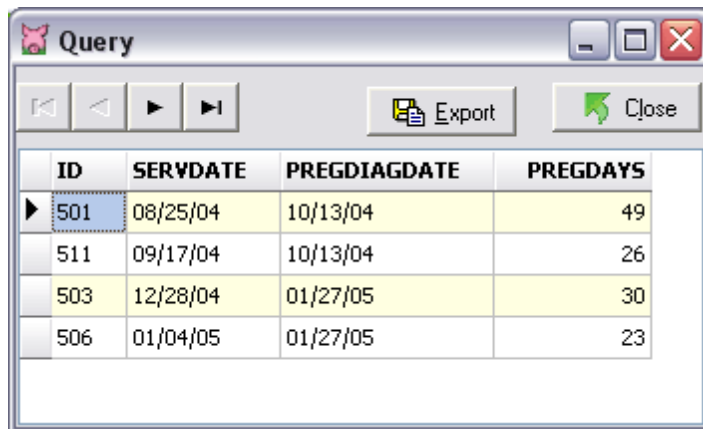
Use Query report designer. The setup screen is shown below:

Tables: SERVICEEX
Columns: ID, SERVDATE, PREGDIAGDATE
Criteria: PREGDIAGRESULT=2 AND SERVRESULT<>'#Birthing#'
Sorting: BY SERVDATE, ID

Or you can use directly SQL:

```
SELECT ID, SERVDATE, PREGDIAGDATE,
PREGDIAGDATE - SERVDATE AS PREGDAYS
FROM SERVICEEX
WHERE PREGDIAGRESULT=2 AND SERVRESULT<>'#Birthing#'
ORDER BY SERVDATE, ID
```

The Query report is shown below:



ID	SERVDATE	PREGDIAGDATE	PREGDAYS
501	08/25/04	10/13/04	49
511	09/17/04	10/13/04	26
503	12/28/04	01/27/05	30
506	01/04/05	01/27/05	23

19.2.1.5 Aborted between 65 and 90 days gestation

I would like a list of females that aborted between 65 and 90 days of gestation, served after May 3 2001.

Use Query report designer. The setup screen is shown below:

Tables: SERVICEEX

Columns: ID, SERVDATE, SERVRESULTDAYS

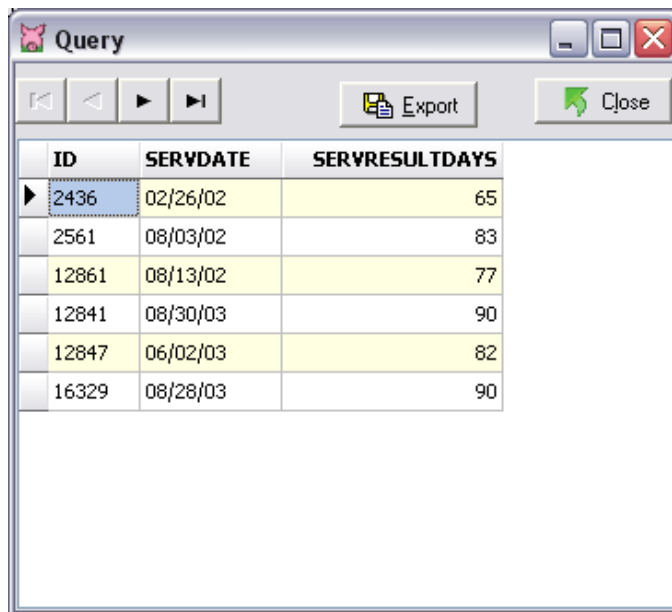
Criteria: SERVRESULT='#Abortion#' AND SERVRESULTDAYS BETWEEN 65 AND 90 AND SERVDATE>='2001 MAY 3'

Sorting:

Or you can use SQL directly:

```
SELECT ID, SERVDATE, SERVRESULTDAYS
FROM SERVICEEX
WHERE SERVRESULT='#Abortion#'
AND SERVRESULTDAYS BETWEEN 65 AND 90 AND SERVDATE>='2001 MAY 3'
```

The Query report is shown below:



ID	SERVDATE	SERVRESULTDAYS
2436	02/26/02	65
2561	08/03/02	83
12861	08/13/02	77
12841	08/30/03	90
12847	06/02/03	82
16329	08/28/03	90

19.2.1.6 Number of fall-out by the date fell out

I want to see the number of fall-out by the date they fell out. I would like a report that expanded this to include also number of preg check open, found open, aborted, died and other removals in the time period.

Porcitech includes a report called "farrowing Analysis: Reason not farrow". We can base on this because most of the fields are the same, except that the pivot date is the service date instead of the fall-out date.

1. Go to **Reports** and click the above report that you want to modify.
2. Click **Design**.
3. In the parameter screen appear, click **Ok**.
4. In Menu, click **Report** and then **Database**.
5. Click **Edit** button.
6. You can see the report SQL statement. Replace the text **servdate** by **servresultdate**.
7. Click **Ok**, click **Ok** again and return to the designer.
8. In the column header band, double click **Service Date** box and replace it by **Result Date**.
9. Now, the report works fine but some fields do not make sense since the breakdown is by the fall-out date. Delete the Preg or Farrowed column (in header, detail and summary bands).
10. Click **Quit** button and save the new report.

19.2.1.7 Current and previous liveborn

I want to see the females with less than 6 born alive in two consecutive farrowings.

Use Query report designer. The SQL statement is shown below:

```
SELECT CUR.ID, CUR.LIVEBORN, PREV.LIVEBORN
FROM FEMALEEX CUR
JOIN PARITY PREV ON PREV.IID_PARITY=CUR.IID_PREVPARITY
WHERE CUR.ISACTIVE=1 AND CUR.LIVEBORN <6 AND PREV.LIVEBORN<6
```

19.2.1.8 Removed female list

I need a list of the following variables: Female ID, birthdate, removal date, last birthing date and last weaning date of females removed within 2004, ordered by removal date.

Use Query report designer. The setup screen is shown below:

Tables: FEMALEEX

Columns: ID, BIRTHDATE, REMOVEDATE, BIRTHINGDATE, ENDLACDATE

Criteria: REMOVEDATE BETWEEN '01 JAN 2004' AND '31 DEC 2004'

Sorting: REMOVEDATE, ID

Or you can use SQL directly:

```
SELECT ID, BIRTHDATE, REMOVEDATE, BIRTHINGDATE, ENDLACDATE
FROM FemaleEx
WHERE REMOVEDATE BETWEEN '01 JAN 2004' AND '31 DEC 2004'
ORDER BY F.REMOVEDATE ASC, F.ID ASC
```

The Query report is shown below:

ID	BIRTHDATE	REMOVEDATE	BIRTHINGDATE	ENDLACDATE
178		01/03/04	09/21/03	10/09/03
119		01/15/04	12/20/03	01/08/04
311		01/15/04	11/17/03	11/28/03
162		01/17/04	01/06/04	01/17/04
13		01/27/04	11/05/03	11/27/03
257		01/27/04	05/21/03	06/12/03
353		01/27/04	01/04/04	01/22/04
152		01/29/04	12/31/03	01/22/04
78		01/29/04	01/02/04	01/22/04
386	12/14/02	02/03/04	01/12/04	01/29/04
276		02/09/04	05/31/03	06/19/03
266		02/14/04	10/10/03	10/30/03
198		02/17/04	11/29/02	12/19/02
109		02/19/04	01/18/04	02/12/04
115		02/19/04	01/18/04	02/12/04
69		02/25/04	07/09/03	07/31/03
220		02/26/04	02/13/04	02/26/04
226		02/26/04	02/13/04	02/26/04

19.2.1.9 Export historical parity data

We work with a company that requires historical data for females that have been culled within 2004 because they have done some carcass evaluations autopsies/postings, etc., on these animals. They would like to know what their reproductive histories show compared to their physical condition. The data needs to contain the basic information of each parity (liveborn, stillborn, weaned, dates, ...). The file generated must be exported to Microsoft Excel format.

Use Query report designer, this type of report allows a direct exportation to Microsoft Excel. The setup screen is shown below:

Tables: PARITYEX
Columns: ID, GENETICS, ENTRYAGE, PARITY, CONCEPTDATE, BIRTHINGDATE, LIVEBORN, STILLBORN, MUMMIES, TOTALWEANED, LACTATIONLEN, REMOVEDATE, REMOVE REASON
Criteria: REMOVEDATE BETWEEN '1 JAN 04' AND '31 DEC 04'
Sorting: REMOVEDATE, ID, PARITY

Or you can use directly SQL:

```
SELECT
ID, GENETICS, ENTRYAGE, PARITY,
CONCEPTDATE, BIRTHINGDATE, LIVEBORN,
STILLBORN, MUMMIES, TOTALWEANED,
LACTATIONLEN, REMOVEDATE , REMOVEAREASON
FROM PARITYEX
WHERE
REMOVEDATE BETWEEN '1 JAN 04' AND '31 DEC 04'
ORDER BY REMOVEDATE , ID, PARITY
```

19.2.1.10 Pregnancy check result list

I want to see a list of pregnancy check results within 2004 year.

Use [Query report designer](#). The setup screen is shown below:

Tables:	SERVICERESULT
Columns:	ID, SERVDATE, PREGDIAGDATE,PREGDIAGRESULT
Criteria:	PREGDIAGDATE BETWEEN '1 JAN 04' AND '31 DEC 04'
Sorting:	PREGDIAGDATE , ID

Or you can use directly SQL:

```
SELECT ID, SERVDATE, PREGDIAGDATE,
PREGDIAGRESULT
FROM SERVICERESULT
WHERE
PREGDIAGDATE
BETWEEN '1 JAN 04' AND '31 DEC 04'
ORDER BY PREGDIAGDATE , ID
```

19.2.1.11 Heat treatment and litter size

I treat females with PG600 if they do not come into heat after weaning. I would like to know if this treatment has an effect on subsequent litter size.

Use [Query report designer](#) or List Data report designer. This consult implies to use 2 tables: ServiceResultEx and Treatment. We only include treatment events within 5 days before the service date with TREATNAME='PG600'

The SQL statement is:

```
SELECT TREATDATE, ID, SERVDATE, TOTALBORN, LIVEBORN, STILLBORN
FROM SERVICERESULT, TREATMENT
WHERE SERVICERESULT.IID_FEMALE=TREATMENT.IID_MASTER
AND SERVDATE-TREATDATE BETWEEN 0 AND 5
AND TREATNAME='PG600'
```

19.2.1.12 Served females sorted by breeding group

I want to see a list of served females sorted by breeding group Id.

Use [Query report designer](#) or List Data report designer. The setup screen is shown below:

Tables: FEMALEX
Columns: SERVGROUPID, ID, SERVDATE
Criteria: ISACTIVE=1 AND(REPROSTATUS=2 OR REPROSTATUS=3)
Sorting: SERVGROUPID, ID

Or you can use directly SQL:

```
SELECT SERVGROUPID, ID, SERVDATE
FROM FemaleEx
WHERE ISACTIVE=1 AND (REPROSTATUS=2 OR REPROSTATUS=3)
ORDER BY SERVGROUPID, ID
```

19.2.1.13 Females arrived and first service result between 2 dates

I would like to see a list of breeding females that arrived on the farm during December 2006 with the following information for the first service at arrival: id, entry date, age at entry, service date, service result, farrowing date, total born. If they have not been served, the service data must appear blank.

In most of cases, Porcitech can solve any consult using only one table. Sometimes, it is necessary to join one or more tables to get the expected result. This is a special case and it requires joining 2 tables: Female and ServiceResult.

We cannot use only FemaleEx because this table contains only current parity data and does not include data from all parities. If we only use ServiceResult table, without joining the Female table, females with no services in their record will not be included in the above selection. Therefore we need to use both the Female table and the ServiceResult table.

Female table	ServiceResult table
Female Id	service date
Entry date	service result
Age at entry	Farrowing date
	Total born

Each female may contain several parities and each parity may contain several services. ServiceResult table contains all services and their results. We can use the filter **Parity=0 AND NServices=1** to get only first services.

The setup screen for Query report is shown below:

Tables: FemaleEx F, ServiceResult S

Link Options: Table1: FemaleEx, Field1: IID_Female, Table2: ServiceResult, Field2: IID_Female
Join Operator: =
Join Type: Left Outer Join

Columns: F.Id
F.EntryDate
F. EntryDate - F.BirthDate AS Age
S.ServDate
S.ServResult
S.BirthingDate
S.TotalBorn

Criteria: S.Parity=0 AND S.NService=1 AND F.EntryDate BETWEEN '2006-12-1' AND '2006-12-31'

Sorting: F.EntryDate, F.ID

Or you can use directly SQL:

```
SELECT F.Id, F.EntryDate, F. EntryDate - F.BirthDate AS Age, S.ServDate,
S.ServResult, S.BirthingDate, S.TotalBorn
FROM FemaleEx F
```

```
LEFT OUTER JOIN ServiceResult S ON F.IID_Female=S.IID_Female
WHERE S.Parity=0 AND S.NService=1
AND F.EntryDate BETWEEN '2006-12-1' AND '2006-12-31'
ORDER BY F.EntryDate, F.ID
```

19.2.1.14 Wean date and subsequent service result

I would like to see a list females and their weaning dates and their first service result after weaning (service date, service result, farrowing date, total born) within the year 2007.

Use [Query report designer](#). The setup screen is shown below:

Tables: ServiceResult
Columns: Id, PrevEndLacDate, ServDate, ServResult, BirthingDate, TotalBorn
Criteria: NService=1 AND PrevEndLacDate BETWEEN '2007/1/1' AND '2007/12/31'
Sorting: PrevEndLacDate, Id

Or you can use directly SQL:

```
SELECT Id, PrevEndLacDate, ServDate, ServResult, BirthingDate, TotalBorn
FROM ServiceResult
WHERE NService=1
AND PrevEndLacDate BETWEEN '2007/1/1' AND '2007/12/31'
ORDER BY PrevEndLacDate, Id
```

19.2.1.15 Previous birthing location

I would like to create a list of all service results within year, displaying service date, service result and to see the next parity data as parity number, birth date and total born. Also, I want to see the current birth location and the birth location of the previous parity.

Using SQL:

```
SELECT A.ID, A.BIRTHLOCATION, B.BIRTHLOCATION AS PREV_BIRTHLOCATION,
A.GENETICS, A.SERVDATE, A.SERVRESULT,
A.SERVRESULTDAYS, A.BIRTHINGDATE, A.PARITY, A.TOTALBORN, A.LIVEBORN, A.
STILLBORN
FROM SERVICERESULT A LEFT JOIN PARITY B ON A.IID_PARITY=B.IID_PARITY
WHERE A.SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'
ORDER BY A.SERVDATE, A.ID
```

19.2.1.16 Current repeat females

I want to see a list of females that have had two or more services in their current parity. In this list, I would like to show female Id, status, service date and number of service.

Use Query report designer or List Data report designer. The setup screen is shown below:

Tables:	FEMALEX
Columns:	ID, STATUSCODE, SERVDATE, NSERVICE
Criteria:	ISACTIVE=1 AND NSERVICE>1
Sorting:	ID

Or you can use directly SQL:

```
SELECT ID, STATUSCODE, SERVDATE, NSERVICE
FROM FemaleEx
WHERE ( ISACTIVE=1 AND NSERVICE>1 )
ORDER BY ID ASC
```

19.2.1.17 Induced heat treatments

I would like to see the number of matings and Heat Not Served events for each treatment, within year 2006. Additionally, I want to see the female ID, treatment ID, treatment date and farrowing date.

Using the Query report designer, the SQL statement is:

```
SELECT ID, TREATDATE, TREATNAME, BIRTHINGDATE,
(SELECT COUNT(*) FROM MATING WHERE IID_LSTTREATMENT=TREATMENTEX.
IID_TREATMENT) AS MATINGS,
(SELECT COUNT(*) FROM HEATNS WHERE IID_LSTTREATMENT=TREATMENTEX.
IID_TREATMENT) AS HEATNS
FROM TREATMENTEX
WHERE TREATDATE BETWEEN '2006-1-1' AND '2006-12-31'
ORDER BY ID, TREATDATE
```

19.2.1.18 Management list: Vaccinations

I want to create a report that lists females due for vaccinations. In this case using 2 vaccines:

- 1.Vaccine A to females 15 days after service.**
- 2.Vaccine B to pig at 6 days after birth.**

This report can be created using the **Query** or **List Data** report designer. However, for management reports, Porcitech includes an specialized report designer called **Task Schedule** that is easy to use for this type of report.

Creating the report

- 1.**Go to Reports and click **New**.
- 2.**Double click **Task Schedule** report designer.
- 3.**Enter the report title in the **Title** box.
- 4.**Click **Options** sheet.
- 5.**The report designer allows you to enter up to 3 filters according to the female status value. In Filter 1, select **Status=Served**.
- 6.**Enter **15** in **Days**.
- 7.**Enter **Vaccine A** in **Title**. This columns defines the filter for the Vaccine A.
- 8.**Now, you must define the second vaccine. Go to the second column (Filter 2) and select **Status=Lactating**.
- 9.**Enter **6** in **Days**.
- 10.**Enter **Vaccine B** in **Title**.
- 11.**In the Filtering you can define a global filter if it is necessary, for example by location, origin, etc. Leave it in blank for this example.
- 12.**Click **Save** button to save the report.
- 13.**Enter the report name, for example **Vaccines** and click **Ok**.

14. Click **Close**.

Note: In task reports, use the **Date to Exclude Overdue Females** to exclude overdue females.

Listing the report

1. Go to **Reports** and select the **User** sheet.
2. Double click the above report.
3. In the parameter dialog, you can specify additional filters or sort order.
4. Uncheck **Include Overdue Females** if you want to exclude females with vaccinations out of the period defined in the top of this screen.
5. Click **Ok** to see the report.

19.2.1.19 Active males

I would like to see a list of active males with the following information: Code, location, register Id, birth date, entry date and score, sorted by code.

The setup screen for the Query report is shown below:

Tables: INDIVIDUAL
Columns: ID, LOCATION, REGISTERID, BIRTHDATE, ENTRYDATE, SCORE
Criteria: ISACTIVE=1 AND SEX='M' AND ANTYPE='B'
Sorting: ID

Or you can use SQL directly:

```
SELECT ID, LOCATION, REGISTERID, BIRTHDATE, ENTRYDATE, SCORE
FROM INDIVIDUAL
WHERE ISACTIVE=1 AND SEX='M' AND ANTYPE='B'
ORDER BY ID
```

19.2.1.20 Farrowing interval

I have unusually high values of farrowing interval in May 2007. I would like to see a list of females by ID and their farrowing intervals for this period.

The setup screen for the Query report is shown below:

Tables: ParityEx
Columns: ID, BirthingDate, BirthingInt
Criteria: BirthingDate BETWEEN '2007-5-1' AND '2007-5-31'
Sorting: BirthingDate, ID

19.2.1.21 Service result and male data

I want to see the services for the year 2007, including service date, female, result, male, male genetics, male birthdate and register ID of male.

Use Query report designer. The SQL statement is shown below:

```
SELECT
ServiceResult.ServDate, ServiceResult.Id, ServiceResult.ServResult,
ServiceResult.ServMale, ServiceResult.ServMaleGenetics,
```

```

Individual.Id, Individual.BirthDate, Individual.RegisterID
FROM
ServiceResult LEFT OUTER JOIN Individual
ON ServiceResult.ServMale=Individual.Id AND Individual.Sex='M'
WHERE ServiceResult.ServDate between '1 JAN 2007' AND '31 DEC 2007'
ORDER BY ServiceResult.ServDate

```

19.2.1.22 Removed females by parity and genetics crosstab

I want to know the number and percentage by parity and genetics of removed females within the year 2006.

The setup screen for Crosstab report is shown below:

Table:	FemaleEx
Column Variable:	Parity
Row Variable:	Genetics
Filtering:	RemoveDate BETWEEN '1 JAN 2006' AND '31 DEC 2006'
Percents:	On

19.2.1.23 Previous, current and subsequent performance in nurse females

I want a list of females used as nurse females, and to see their production in previous and subsequent parities, from 2000 to end of 2007.

Use Query report designer. In this case, we use three joined tables (previous, current and next parity). The SQL statement is shown below:

```

SELECT
CurParity.ID,
PrevParity.TotalBorn as PrevTotalBorn,
CurParity.BirthingDate CurBirthingDate,
100.00/NULLIF(PrevParity.NSERVICES,0) as CurBirthingRate,
CurParity.TOTALBORN as CurTotalBorn,
CurParity.NSERVICES,
100.00/NULLIF(CurParity.NSERVICES,0) as NextBirthingRate,
NextParity.TotalBorn as NextTotalBorn
FROM ParityEx CurParity
JOIN Parity NextParity ON NextParity.IID_Parity=CurParity.IID_NextParity
JOIN Parity PrevParity ON PrevParity.IID_Parity=CurParity.IID_PrevParity
WHERE CurParity.LNurseOnDate IS NOT NULL AND PrevParity.BirthingDate IS
NOT NULL
AND CurParity.BirthingDate BETWEEN '1JAN2000' AND '31DEC2007'

```

19.2.1.24 Served by 7 days after weaning

I want a list of females served by 7 days after weaning.

Use [Query report designer](#). The setup screen is shown below:

Tables: ParityEx
Columns: Id, WeanFstServ, EndLacDate
Criteria: WeanFstServ<=7
Sorting: EndLacDate, Id

Or you can use directly SQL:

```
SELECT  
Id, WeanFstServ, EndLacDate  
FROM ParityEx  
WHERE WeanFstServ<=7
```

19.2.1.25 Days from previous heat in parity 0

We record Heat Not Served events in parity 0 females. We want a list of the females with Heat Not Served events and the number of days to their previous heat.

Use [Query report designer](#). The SQL statement is shown below:

```
SELECT Id, HeatDate, PriorHeatDays
FROM HeatNS JOIN FemaleEx
ON HeatNS.IID_Female=FemaleEx.IID_Female
WHERE IsActive=1 AND Parity=0 AND NServices=0
ORDER BY Id, HeatDate
```

19.2.1.26 Females with failed service

I want to see a list of females with a failed service date within the year 2004.

Use [Query report designer](#) or List Data report designer.

The SQL statement is:

```
SELECT ID, PARITY, SERVDATE, SERVRESULTDAYS,
SERVRESULTDATE, SERVGROUPID, SERVRESULT,
SERVMALE, SERVTECH
FROM ServiceResult
WHERE SERVRESULT<>'#Unknown#' AND
SERVRESULTDATE
BETWEEN '1 JAN 04' AND '31 DEC 04'
ORDER BY SERVDATE , ID
```

19.2.1.27 Reasons fall-out

I want to know how many parity 0 and parity 1 females have a repeat service in their parity. I also want to know the reason for the negative service result and the number of services given to repeat females until they farrow or are removed.

Use [Query report designer](#). The setup screen is shown below:

Tables: ServiceResult

Columns: Id, ServDate, Parity, NService, ServResultDays, ServResult

Criteria: Parity<2 AND (NService>1 OR ServResult NOT IN ('#Birthing#', '#Unknown#'))

Sorting: Id, ServDate

Or you can use directly SQL:

```
SELECT Id, ServDate, Parity, NService, ServResultDays, ServResult
```

```
FROM ServiceResult
WHERE Parity<2 AND (NService>1 OR ServResult NOT IN ('#Birthing#',
'#Unknown#'))
ORDER BY Id, ServDate
```

19.2.1.28 Farrowing data and subsequent result

I want to see the Farrowing data and subsequent result. Specifically I want to see the female ID, Farrowing date, parity, liveborn, wean information, the service after weaning and its result, including the subsequent Farrowing.

Use [Query report designer](#). The setup screen is shown below:

Tables:	ParityEx P, ServiceResult S
Link Options:	Table1: ParityEx, Field1: IID_FstService, Table2: ServiceResult, Field2: IID_Service
	Join Operator: =
	Join Type: Left Outer Join
Columns:	P.ID
	P.Parity
	P.BirthingDate
	P.Liveborn
	P.NetFostered
	P.LWeanDate
	P.TotalWeaned
	S.ServDate
	S.ServResult
	S.BirthingDate
	S.LiveBorn
Criteria:	
Sorting:	P.BirthingDate ASC, P.ID

Or you can use directly SQL:

```
SELECT P.ID, P.Parity, P.BirthingDate, P.Liveborn, P.NetFostered, P.
LWeanDate, P.TotalWeaned,
S.ServDate, S.ServResult, S.BirthingDate, S.LiveBorn
FROM ParityEx P
LEFT OUTER JOIN ServiceResult S ON ( P.IID_FstService = S.IID_Service )
ORDER BY P.BirthingDate ASC, P.ID ASC
```

19.2.2 Counts and averages

19.2.2.1 Number of unmated breeding

I would like a count of the number of unmated breeding females currently in my herd:

The setup screen for Query report is shown below:

Tables: FEMALEX

Columns: ENTRYDATE (Group=Yes), ID (Function=Count)

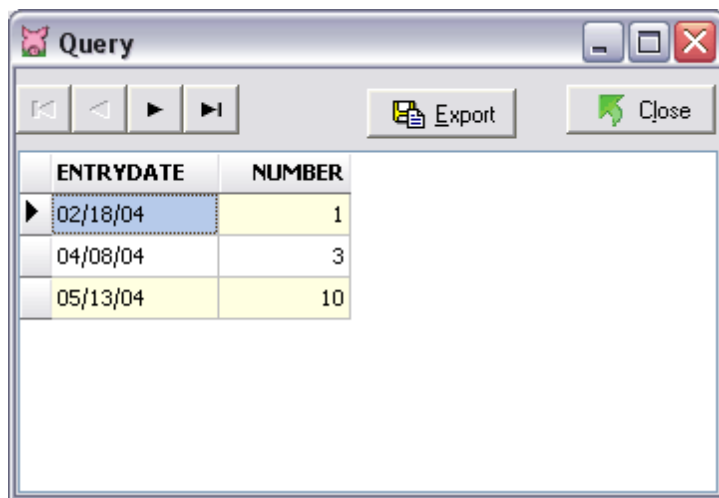
Criteria: STATUSCODE='E'

Sorting: ENTRYDATE

Or you can use SQL directly:

```
SELECT ENTRYDATE, COUNT(*) AS NUMBER
FROM FEMALEEX
WHERE STATUSCODE='E'
GROUP BY ENTRYDATE
ORDER BY ENTRYDATE
```

The Query report is shown below:



ENTRYDATE	NUMBER
02/18/04	1
04/08/04	3
05/13/04	10

19.2.2.2 Number of unmated breeding females by age

I would like a count of the number of unmated breeding females currently in my herd by age, that are at least 200 days of age:

The setup screen for Query report is shown below:

Tables: FEMALEX

Columns: ENTRYDATE (Group=Yes), ID (Function=Count)

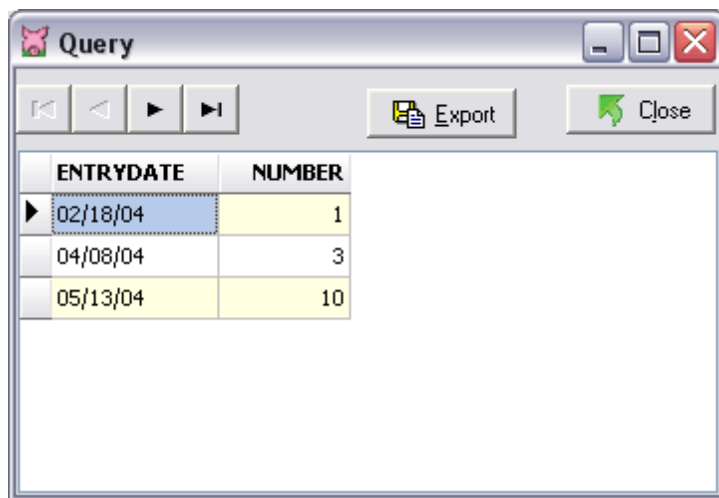
Criteria: STATUSCODE='E' AND CURRENT_DATE-ENTRYDATE>200

Sorting: ENTRYDATE

Or you can use SQL directly:

```
SELECT ENTRYDATE, COUNT(*) AS NUMBER
FROM FEMALEEX
WHERE STATUSCODE='E'
AND CURRENT_DATE-ENTRYDATE>200
GROUP BY ENTRYDATE
ORDER BY ENTRYDATE
```

The Query report is shown below:



ENTRYDATE	NUMBER
02/18/04	1
04/08/04	3
05/13/04	10

19.2.2.3 Farrowing rate and litter size of parity 1 nurse females

I want to know the subsequent birthing rate and litter size of parity 1 females used as nurse females.

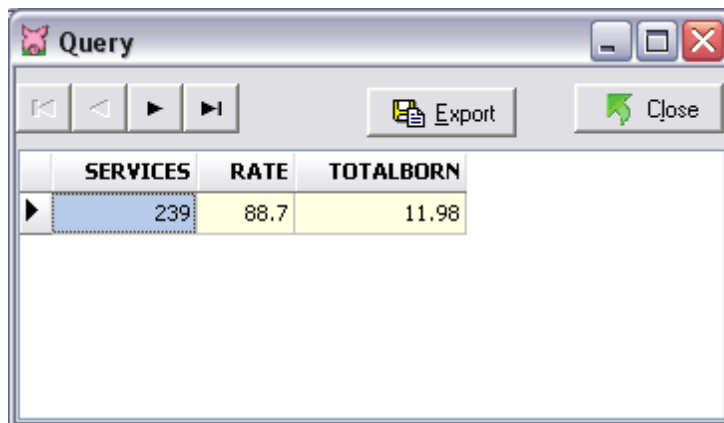
We use Query report. First, we need a list of females used as nurse female in parity=1. We use IID_FEMALE as female ID, it is very fast:

```
SELECT IID_FEMALE
FROM PARITY
WHERE LNURSEONDATE IS NOT NULL
AND PARITY=1
```

Now, we select all subsequent parities of the above females:

```
SELECT
COUNT(*) AS SERVICES,
AVG ( 100.00*SERVBIRTHING) AS RATE,
AVG (1.00*TOTALBORN) AS TOTALBORN
FROM SERVICERESULT
WHERE PARITY=2
AND IID_FEMALE IN
(SELECT IID_FEMALE FROM PARITY
WHERE LNURSEONDATE IS NOT NULL AND PARITY=1)
```

The Query report is shown below:



SERVICES	RATE	TOTALBORN
239	88.7	11.98

19.2.3 Breakdowns

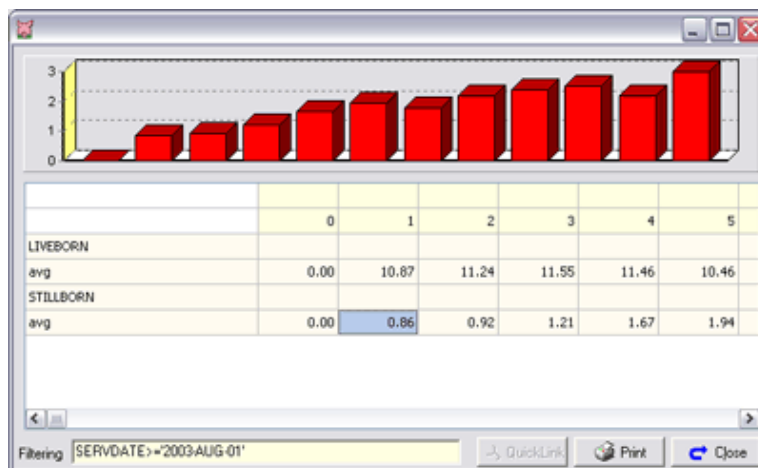
19.2.3.1 Liveborn and stillborn average by parity

I would like to see the average number of liveborn and stillborn by parity, of females with a service date after August 1, 2001:

Use Breakdown report designer. The setup screen is shown below:

Tables: PARITYEX
Variable: PARITY
Variables to Analyze: LIVEBORN
 STILLBORN
Functions: Arithmetic Mean
Filtering SERVDATE>='2003-AUG-01'

The Breakdown report is shown below:



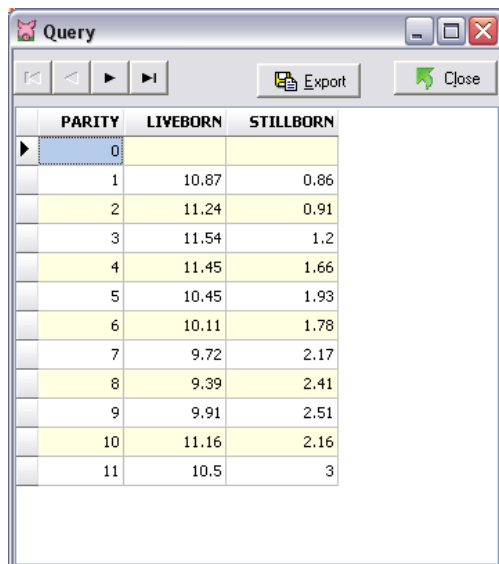
Another option is to use the Query report designer. The setup screen for the Query report is shown below:

Tables: PARITYEX
Columns: PARITY (Group=Yes), LIVEBORN (Function=Avg), STILLBORN (Function=Avg)
Criteria: SERVDATE>='2003-AUG-01'
Sorting: PARITY

Or you can use SQL directly:

```
SELECT PARITY, AVG ( CAST(LIVEBORN AS FLOAT) ), AVG ( CAST(STILLBORN AS
FLOAT) )
FROM PARITYEX
WHERE SERVDATE>='2003-AUG-01'
GROUP BY PARITY ORDER BY PARITY
```

The Query report is shown below:



	PARITY	LIVEBORN	STILLBORN
▶	0		
	1	10.87	0.86
	2	11.24	0.91
	3	11.54	1.2
	4	11.45	1.66
	5	10.45	1.93
	6	10.11	1.78
	7	9.72	2.17
	8	9.39	2.41
	9	9.91	2.51
	10	11.16	2.16
	11	10.5	3

19.2.3.2 Liveborn and stillborn average by parity for removed females

I want to know the average bornalive and stillborn of each parity for females removed at parity=7.

Use Breakdown report designer. The setup screen is shown below:

Tables:	ParityEx
Variable:	Parity
Variables to Analyze:	Liveborn Stillborn
Functions:	Arithmetic Mean
Filtering	IsActive=0 and CurParity=7

19.2.3.3 Litter size and farrowing rate of sows by previous lactation length

I want to know the average litter size and farrowing rate by previous lactation length, of females served in the year 2003:

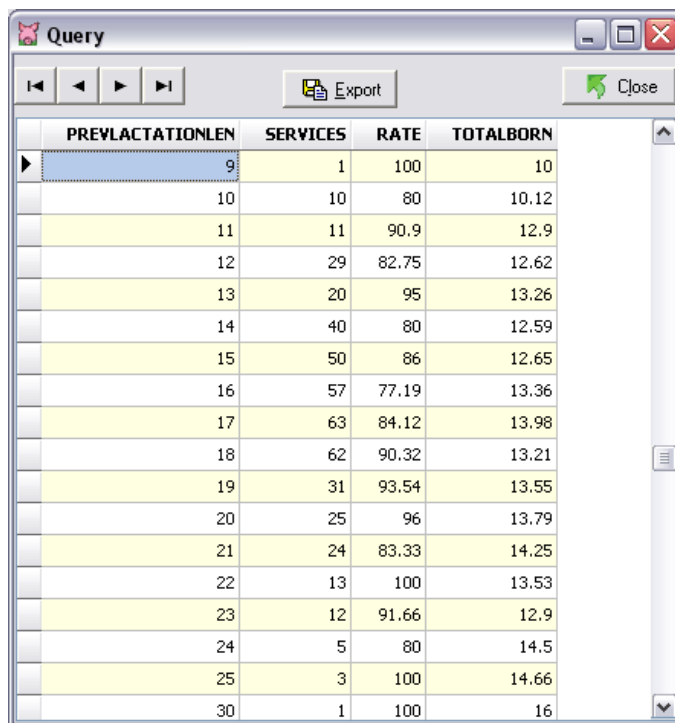
The setup screen for Query report is shown below:farrowing

Tables:	SERVICERESULT
Columns:	PREVLACTATIONLEN (Group=Yes), SERVDATE (Function=Count), SERVBIRTHING (Function=Avg), TOTALBORN (Function=Avg)
Criteria:	SERVDATE BETWEEN '2003-JAN-1' AND '2003-DEC-31'

Or you can use SQL directly:

```
SELECT PREVLACTATIONLEN,
COUNT(SERVDATE) AS SERVICES,
AVG ( 100.00*SERVBIRTHING) AS RATE,
AVG (1.00*TOTALBORN) AS TOTALBORN
FROM SERVICERESULT
WHERE SERVDATE BETWEEN '2003-JAN-1' AND '2003-DEC-31'
GROUP BY PREVLACTATIONLEN
```

The Query report is shown below:



Query window showing a table with the following columns: PREVLACTATIONLEN, SERVICES, RATE, and TOTALBORN. The table contains 20 rows of data.

PREVLACTATIONLEN	SERVICES	RATE	TOTALBORN
9	1	100	10
10	10	80	10.12
11	11	90.9	12.9
12	29	82.75	12.62
13	20	95	13.26
14	40	80	12.59
15	50	86	12.65
16	57	77.19	13.36
17	63	84.12	13.98
18	62	90.32	13.21
19	31	93.54	13.55
20	25	96	13.79
21	24	83.33	14.25
22	13	100	13.53
23	12	91.66	12.9
24	5	80	14.5
25	3	100	14.66
30	1	100	16

19.2.3.4 Litter size and farrowing rate by previous wean to first service interval

I want to know the average litter size and farrowing rate by previous wean to first service interval, when days from wean to first service interval ≥ 4 and ≤ 10 :

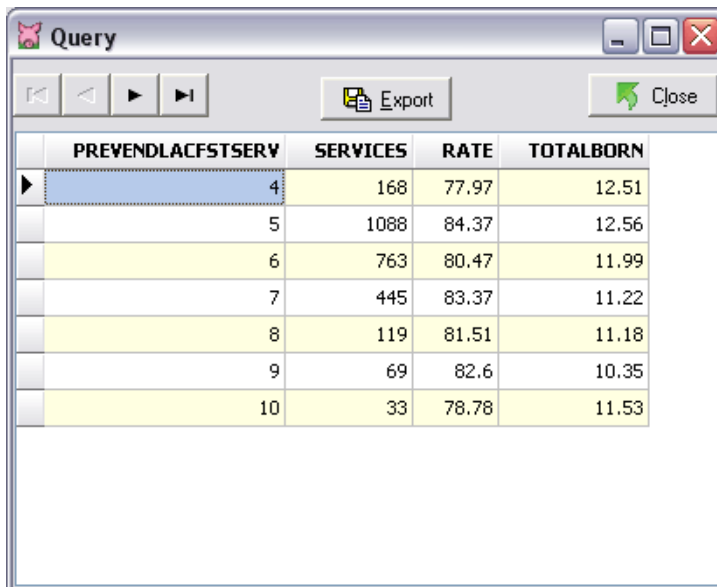
The setup screen for Query report is shown below:

Tables: SERVICERESULT
Columns: PREVENDLACFSTSERV (Group=Yes), SERVDATE (Function=Count), SERVBIRTHING (Function=Avg), TOTALBORN (Function=Avg)
Criteria: PREVENDLACFSTSERV BETWEEN 4 AND 10

Or you can use SQL directly:

```
SELECT PREVENDLACFSTSERV,
COUNT(SERVDATE) AS SERVICES,
AVG ( 100.00*SERVBIRTHING) AS RATE,
AVG (1.00*TOTALBORN) AS TOTALBORN
FROM SERVICERESULT
WHERE PREVENDLACFSTSERV BETWEEN 4 AND 10
GROUP BY PREVENDLACFSTSERV
```

The Query report is shown below:



PREVENDLACFSTSERV	SERVICES	RATE	TOTALBORN
4	168	77.97	12.51
5	1088	84.37	12.56
6	763	80.47	11.99
7	445	83.37	11.22
8	119	81.51	11.18
9	69	82.6	10.35
10	33	78.78	11.53

19.2.3.5 Farrowing rate and litter size of females by mating type

I want to know the farrowing rate and litter size of females by mating type (AI, boar mating, mixed) with a service date from 1997 to 2002. Then I want it broken down by parity 1, 2 and 3. Remember females that are bred as Parity=0 (farrowing rate) will farrow as Parity=1 (litter size).

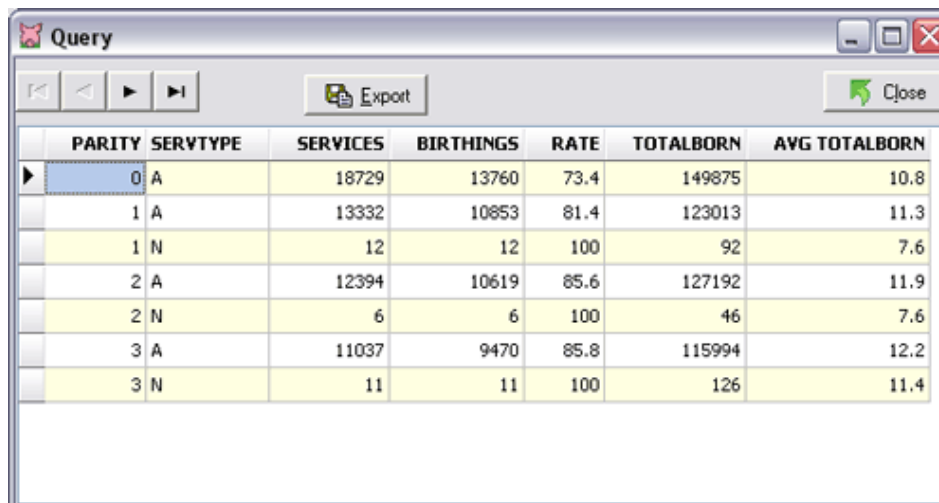
The setup screen for Query report is shown below:

Tables: SERVICERESULT
Columns: PARITY (Group=Yes), SERVTYPE (Group=Yes), SERVBIRTHING (Function=Avg), TOTALBORN (Function =Avg)
Criteria: SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31' AND PARITY<=3
Sorting: PARITY, SERVTYPE

Or you can use SQL directly:

```
SELECT PARITY,
SERVTYPE,
COUNT(*) AS SERVICES,
SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.0*SERVBIRTHING) AS RATE,
SUM(TOTALBORN) AS TOTALBORN,
AVG(1.0*TOTALBORN) AS AVG_TOTALBORN
FROM SERVICERESULT
WHERE SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
AND PARITY<=3
GROUP BY PARITY, SERVTYPE
ORDER BY PARITY, SERVTYPE
```

The Query report is shown below:



PARITY	SERVTYPE	SERVICES	BIRTHINGS	RATE	TOTALBORN	AVG TOTALBORN
0	A	18729	13760	73.4	149875	10.8
1	A	13332	10853	81.4	123013	11.3
1	N	12	12	100	92	7.6
2	A	12394	10619	85.6	127192	11.9
2	N	6	6	100	46	7.6
3	A	11037	9470	85.8	115994	12.2
3	N	11	11	100	126	11.4

19.2.3.6 Farrowing rate and litter size of females by breeding technician

I want to know the farrowing rate and litter size of females by breeding technician. I only want to look at the results of females who were bred by the same technician all matings per female, between 1997 and 2002.

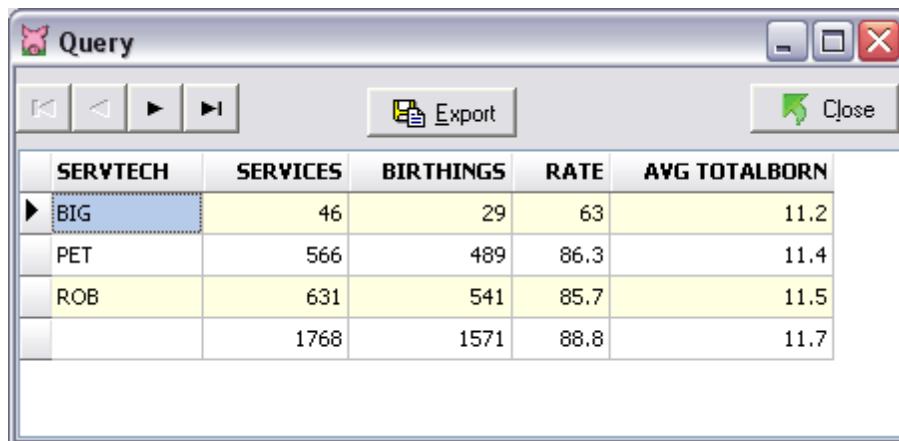
The setup screen for Query report is shown below:

Tables: SERVICERESULT
Columns: SERVTECH (Group=Yes), SERVBIRTHING (Function=Avg), TOTALBORN (Function =Avg)
Criteria: SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'

Or you can use SQL directly:

```
SELECT SERVTECH, COUNT(*) AS SERVICES,
SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.0*SERVBIRTHING) AS RATE,
AVG(1.0*TOTALBORN) AS AVG_TOTALBORN
FROM SERVICERESULT
WHERE SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
GROUP BY SERVTECH
```

The Query report is shown below:



SERVTECH	SERVICES	BIRTHINGS	RATE	AVG TOTALBORN
BIG	46	29	63	11.2
PET	566	489	86.3	11.4
ROB	631	541	85.7	11.5
	1768	1571	88.8	11.7

19.2.3.7 Farrowing rate and litter size of females by entry to first service interval

I want to know the farrowing rate and litter size of first parity females by entry to first service interval.

Use Breakdown report designer. The setup screen is shown below:

Tables: ServiceResult
Variable: POFstServDate-EntryDate
Classes: 0:10 11:20 21:30 31:40 41:50 51:60 61:
Variables to ServBirthing

Analyze: TotalBorn
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering: Parity=0 AND Nservice=1

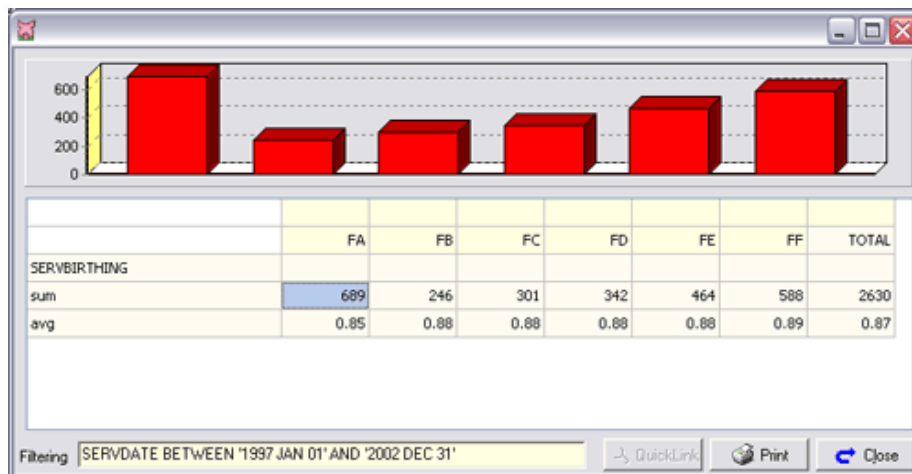
19.2.3.8 Farrowing rate of females gestating in pens vs. crates

I want to know the farrowing rate of females that gestated in pens vs. crates (gestation location) between 1997 and 2002.

The setup screen for Breakdown report is shown below:

Table: SERVICEEX
Variable: GESTLOC1
Variables to Analyze: SERVBIRTHING
Functions: Sum, Arithmetic Mean
Filtering: SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'

The Breakdown report is shown below:



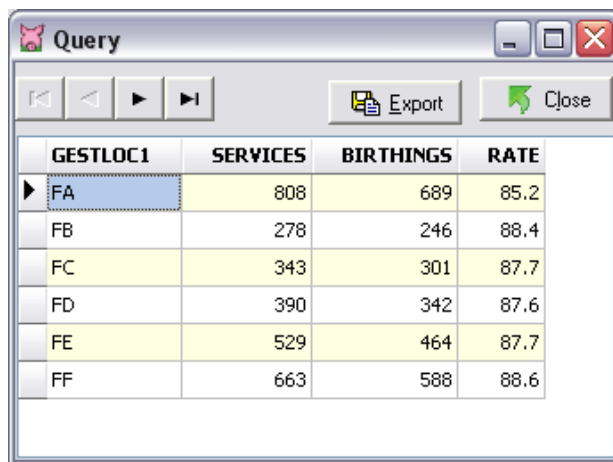
Another option is to use the Query report. The setup screen for Query report is shown below:

Tables: SERVICEEX
Columns: GESTLOC1 (Group=Yes), SERVBIRTHING (Function=Avg)
Criteria: SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
Sorting:

Or you can use SQL directly:

```
SELECT GESTLOC1,
COUNT(*) AS SERVICES, SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.0*SERVBIRTHING) AS RATE
FROM SERVICEEX
WHERE SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
GROUP BY GESTLOC1
```

The Query report is shown below:



The image shows a software window titled "Query" with a standard Windows-style title bar (minimize, maximize, close buttons). Below the title bar is a toolbar with navigation buttons (back, forward, first, last) and two action buttons: "Export" (with a document icon) and "Close" (with a green arrow icon). The main area of the window contains a table with four columns: "GESTLOC1", "SERVICES", "BIRTHINGS", and "RATE". The table has six data rows, labeled FA through FF in the first column. The "SERVICES", "BIRTHINGS", and "RATE" columns have yellow backgrounds. The row for "FA" is highlighted with a blue background and a mouse cursor arrow pointing to the first cell.

GESTLOC1	SERVICES	BIRTHINGS	RATE
FA	808	689	85.2
FB	278	246	88.4
FC	343	301	87.7
FD	390	342	87.6
FE	529	464	87.7
FF	663	588	88.6

19.2.3.9 Farrowing rate and litter size of females by the number of matings per service

I want to know the farrowing rate and litter size of females by the number of matings per service between 1997 and 2002. Then I want to break this down by parity.

The setup screen for Query report is shown below:

Tables: SERVICERESULT
Columns: PARITY (Group=Yes), MATINGS (Group=Yes), SERVBIRTHING (Function=Avg), TOTALBORN (Function =Avg)
Criteria: SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
Sorting: PARITY, MATINGS

Or you can use SQL directly:

```
SELECT PARITY, MATINGS,
COUNT(*) AS SERVICES,
SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.0*SERVBIRTHING) AS RATE,
AVG(1.0*TOTALBORN*SERVBIRTHING) AS AVG_TOTALBORN
FROM SERVICERESULT
WHERE SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
GROUP BY PARITY, MATINGS
ORDER BY PARITY, MATINGS
```

The Query report is shown below:

Query						
PARITY	MATINGS	SERVICES	BIRTHINGS	RATE	AVG TOTALBORN	
0	1	109	88	80.7	10.8	
0	2	361	315	87.2	11.3	
0	3	1	0	0		
1	1	73	57	78	11.5	
1	2	333	301	90.3	11.3	
1	3	6	6	100	12.1	
2	1	54	47	87	11.6	
2	2	325	286	88	11.4	
2	3	3	2	66.6	11	
3	1	50	42	84	11.4	
3	2	305	269	88.1	11.6	
3	3	5	3	60	12	
4	1	41	37	90.2	10.2	
4	2	270	239	88.5	12.2	
4	3	2	2	100	14	
5	1	32	26	81.2	12.3	
5	2	275	235	85.4	12.4	

19.2.3.10 Farrowing rate of females bred on their second service

I want to know the farrowing rate of females bred on their second service (recycles), by parity:

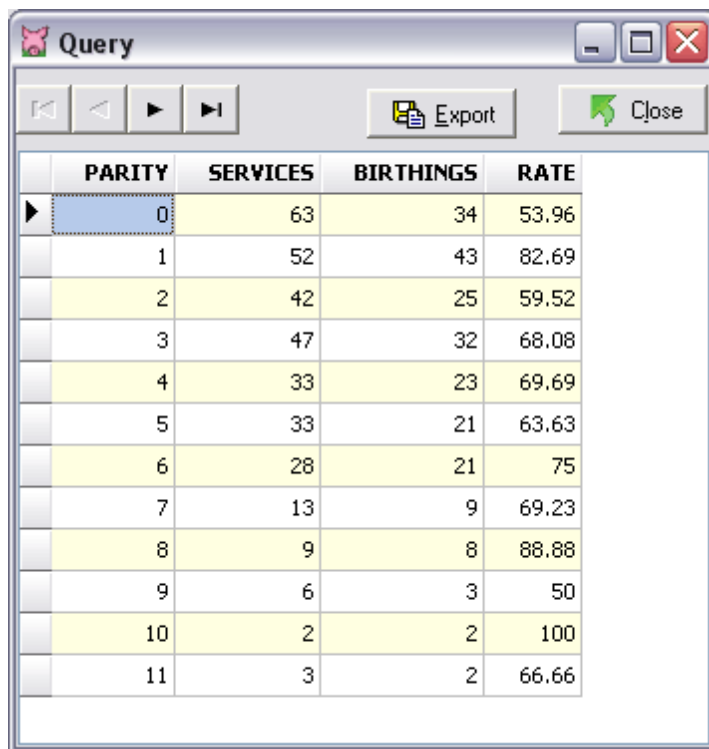
The setup screen for Query report is shown below:

Tables: SERVICEEX
Columns: PARITY (Group=Yes), SERVDATE (Function=Count),
 SERVBIRTHING (Function=Avg)
Criteria: NSERVICE=2
Sorting: PARITY

Or you can use SQL directly:

```
SELECT PARITY, COUNT(*) SERVICES,
SUM(SERVBIRTHING) BIRTHINGS,
AVG(100.00*SERVBIRTHING) AS RATE
FROM SERVICEEX
WHERE NSERVICE=2
GROUP BY PARITY
ORDER BY PARITY
```

The Query report is shown below:



PARITY	SERVICES	BIRTHINGS	RATE
0	63	34	53.96
1	52	43	82.69
2	42	25	59.52
3	47	32	68.08
4	33	23	69.69
5	33	21	63.63
6	28	21	75
7	13	9	69.23
8	9	8	88.88
9	6	3	50
10	2	2	100
11	3	2	66.66

19.2.3.11 Wean1stService and Farrowing rate of females by farrowing problem

I want to know the wean to first service interval and farrowing rate by farrowing problem in a breakdown report.

Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ServiceEx
Variable: BirthingProblem
Variables to Analyze: WeanFstServ
 ServBirthing
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering

Use the **Classes** box to categorize the breakdown. See Defining ranges.

If you want to also include the litter size in the subsequent parity, the configuration is more complex because it is necessary to join two tables. Note that ServiceEx record does not have access to the subsequent parity litter size. Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ServiceResult JOIN Parity ON ServiceResult.IID_Parity=Parity.IID_Parity
Variable: Parity.BirthingProblem
Variables to Analyze: Parity.WeaneFstServ, ServResult.ServBirthing, ServResult.TotalBorn
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering

19.2.3.12 Conception rate of females bred on their second service

I want to know the conception rate of females bred on their second service (recycles) served within the year, by parity:

The setup screen for Query report is shown below:

Tables: SERVICEEX
Columns: PARITY (Group=Yes), SERVDATE (Function=Count), SERVCONCEPTION (Function=Avg)
Criteria: NSERVICE=2 AND SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'
Sorting: PARITY

Or you can use SQL directly:

```
SELECT PARITY, COUNT(*) AS SERVICES,
SUM(SERVCONCEPTION) AS CONCEPTIONS,
AVG(100.00*SERVCONCEPTION) AS RATE
FROM SERVICEEX
WHERE NSERVICE=2 AND SERVDATE BETWEEN '2005-1-1' AND '2005-12-31'
GROUP BY PARITY
```

ORDER BY PARITY

19.2.3.13 Hour of first mating on reproductive performance

What is the farrowing rate and litter size of females with a first mating at 0, 6, 12 and 18 hours after onset of estrus, by month of year between 1997 and 2002? Also sows must have >1 mating/service. Does the time of year have an affect on the length of a female's heat and duration of ovulation? Does waiting to inseminate hurt reproductive performance at different times of the year?

Using the Query report designer, enter the following SQL statement:

```
SELECT
EXTRACT(MONTH FROM SERVDATE) AS N_MONTH,
SERV HOUR1,
COUNT(*) AS SERVICES,
SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.0*SERVBIRTHING) AS RATE,
SUM(TOTALBORN) AS TOTALBORN,
AVG(1.00*TOTALBORN) AS AVG_TOTALBORN
FROM SERVICERESULT
WHERE MATINGS>1
AND SERVDATE BETWEEN '1997 JAN 01' AND '2002 DEC 31'
GROUP BY EXTRACT(MONTH FROM SERVDATE),
SERV HOUR1
ORDER BY EXTRACT(MONTH FROM SERVDATE),
SERV HOUR1
```

The Query report is shown below:

N MONTH	SERV HOUR1	SERVICES	BIRTHINGS	RATE	TOTALBORN	AVG TOTALBORN
1	0	1074	919	85.5	10656	11.59
1	6	1251	1087	86.8	12598	11.58
1	12	2069	1776	85.8	20589	11.59
1	18	2210	1914	86.6	22096	11.54
2	0	1036	922	88.9	10844	11.76
2	6	1259	1123	89.1	13020	11.59
2	12	1568	1371	87.4	16322	11.9
2	18	2208	1929	87.3	22271	11.54
3	0	1103	961	87.1	11223	11.67
3	6	1172	996	84.9	11587	11.63
3	12	2081	1834	88.1	21993	11.99
3	18	2149	1872	87.1	22392	11.96
4	0	1095	928	84.7	10960	11.81
4	6	1348	1174	87	13941	11.87
4	12	1993	1740	87.3	20740	11.91
4	18	2056	1749	85	20781	11.88
5	0	1039	904	87	10632	11.76
5	6	1231	1069	86.8	12735	11.91
5	12	2059	1744	84.7	20755	11.9
5	18	2145	1830	85.3	21712	11.86
6	0	1124	922	82	10453	11.33
6	6	1375	1134	82.4	12981	11.44

19.2.3.14 Hour of first mating and number of matings on reproductive performance

I want to know the farrowing rate and litter size of females bred at the beginning of estrus, or if I wait until 6, 12 or 18 hours after beginning of estrus, by parity. Also I want to know how many matings per service they had if bred at 0, 6, 12, ... hours after beginning of estrus. The range date is the first 6 months of 2003.

Using the Query report designer, enter the following SQL statement:

```
SELECT
PARITY,
SERVHOURL,
COUNT(*) AS SERVICES,
SUM(MATINGS) AS MATINGS,
AVG(1.00*MATINGS) AS MATINGPERSERVICE,
SUM(SERVBIRTHING) AS BIRTHINGS,
AVG(100.00*SERVBIRTHING) AS RATE,
SUM(TOTALBORN) AS TOTALBORN,
AVG(1.00*TOTALBORN) AS AVG_TOTALBORN
FROM SERVICERESULT
WHERE MATINGS>1
AND SERVDATE BETWEEN '2003 JAN 01' AND '2003 JUN 30'
GROUP BY PARITY, SERVHOURL
ORDER BY PARITY, SERVHOURL
```

The Query report is shown below:

PARITY	SERVHOURL	SERVICES	MATINGS	MATINGPE	BIRTHING	RATE	TOTALBORN	AVG TOTALBORN
0	0	396	1116	2.81	295	74.49	3131	10.61
0	6	407	1120	2.75	329	80.83	3487	10.59
0	12	598	1694	2.83	422	70.56	4568	10.82
0	18	637	1742	2.73	496	77.86	5384	10.85
1	0	189	523	2.76	157	83.06	1805	11.49
1	6	252	695	2.75	201	79.76	2247	11.17
1	12	440	1270	2.88	328	74.54	3788	11.54
1	18	469	1285	2.73	364	77.61	4032	11.07
2	0	125	356	2.84	110	88	1322	12.01
2	6	167	474	2.83	136	81.43	1609	11.83
2	12	254	744	2.92	208	81.88	2532	12.17
2	18	281	799	2.84	229	81.49	2733	11.93
3	0	104	301	2.89	92	88.46	1152	12.52
3	6	178	513	2.88	153	85.95	1954	12.77
3	12	248	725	2.92	214	86.29	2670	12.47
3	18	271	771	2.84	230	84.87	2867	12.46
4	0	91	258	2.83	82	90.1	1064	12.97

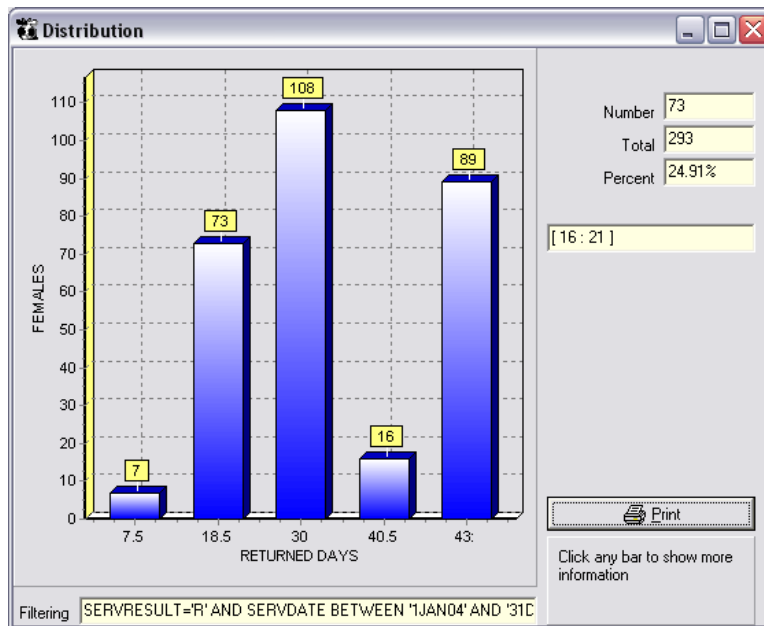
19.2.3.15 Distribution of returns by days to return service

I want to see the distribution of females that return by days to return service using the following ranges: from 0 to 15 days, from 16 to 21 days, from 22 to 38, from 39 to 42, and 43 or more. Only include services in year 2004.

Use the Histogram report designer. The setup screen is shown below:

Table: SERVICEEX
Variable: SERVRESULTDAYS
Filtering: SERVRESULT='#ReturnedToEstrus#' AND SERVDATE BETWEEN '1JAN04' AND '31DEC04'
Axis Type: Free Scale
Classes: 0:15 16:21 22:38 39:42 43:

The Histogram report is shown below:



19.2.3.16 Females entered by month and genetic line

I need to provide data for all females that entered the farm by month by genetic line from 29 Dec 2003 through the present time.

Use Query report designer. The SQL statement is:

```
SELECT
EXTRACT(YEAR FROM ENTRYDATE) AS ENTRY_YEAR,
EXTRACT(MONTH FROM ENTRYDATE) AS ENTRY_MONTH,
GENETICS,
COUNT(*)
FROM FEMALE
WHERE ENTRYDATE >= '2003 DEC 29'
GROUP BY
EXTRACT(YEAR FROM ENTRYDATE),
EXTRACT(MONTH FROM ENTRYDATE),
GENETICS
```

19.2.3.17 Count of females slaughtered by month and parity

I want to know the total number of females that were slaughtered on farm by parity, monthly from 1 Jan 2005 through the present time.

Use Query report designer. The SQL statement is:

```
SELECT
EXTRACT(YEAR FROM REMOVEDATE) AS REMOVE_YEAR,
EXTRACT(MONTH FROM REMOVEDATE) AS REMOVE_MONTH,
CURPARITY,
COUNT(*)
FROM FEMALE
WHERE REMOVEDATE >= '2005 JAN 1'
AND REMOVETYPE=1
GROUP BY
EXTRACT(YEAR FROM REMOVEDATE),
EXTRACT(MONTH FROM REMOVEDATE),
CURPARITY
```

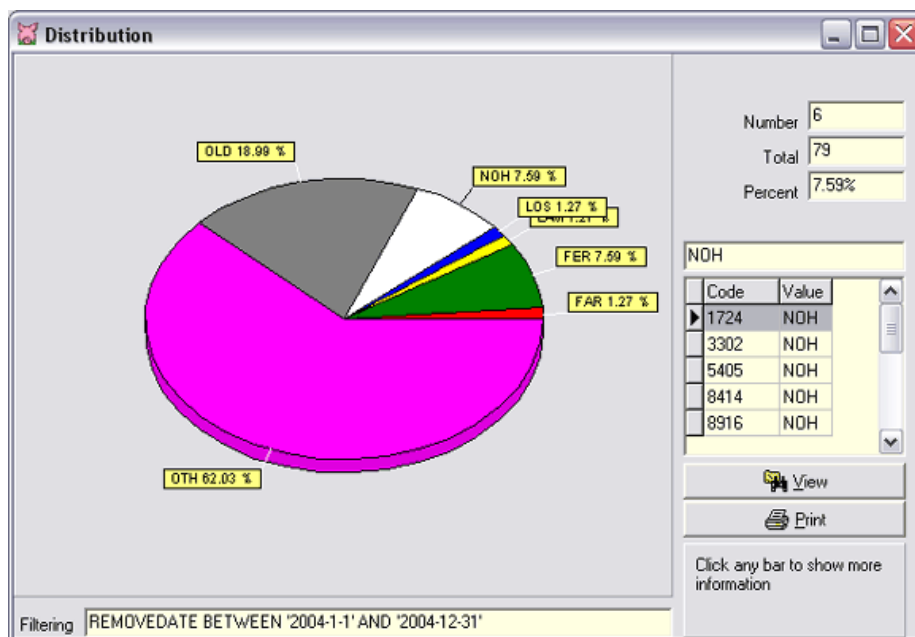
19.2.3.18 Pie chart for the removal reasons of females removed in 2004

I want to see a pie chart for the removal reasons of females removed in 2004.

Use Pie report designer. The setup screen is shown below:

Table: FEMALEEX
Variable: REMOVE REASON
Filtering: REMOVEDATE BETWEEN '2004-1-1' AND '2004-12-31'
Axis: Automatic Scale

The pie chart is shown below:



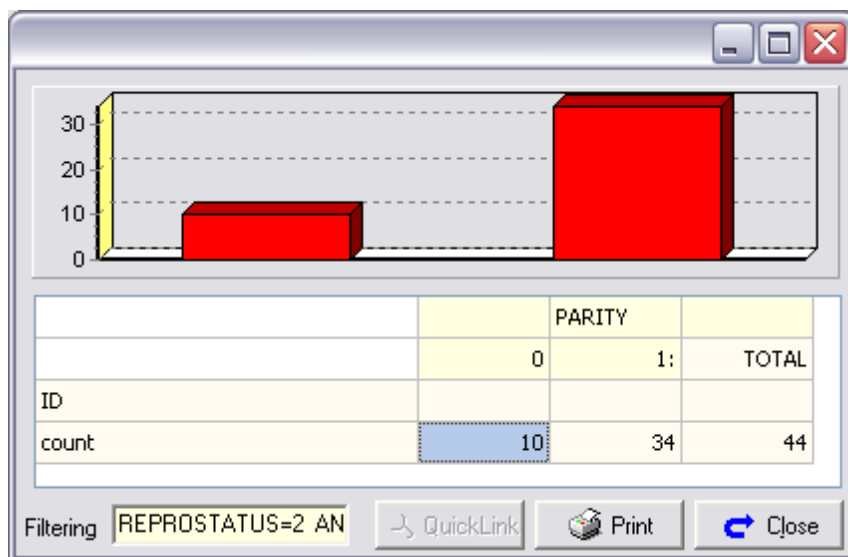
19.2.3.19 Count of females served in January by parity

I want to know the number of females served in January, for parity= 0 and for parity > 0. Only include females that do not have a positive pregnancy check.

Use the Breakdown report designer. The setup screen is shown below:

Table:	FEMALEX
Variable:	PARITY
Classes:	0 1:
Variables to Analyze:	ID
Functions:	Count
Filtering:	REPROSTATUS=2 AND SERVDATE BETWEEN '2005-1-1' AND '2005-1-31'

The Breakdown report is shown below:



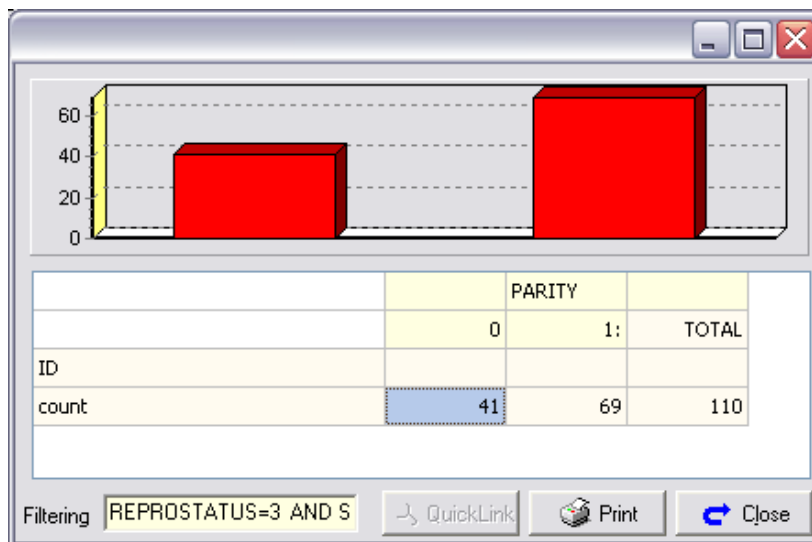
19.2.3.20 Count of females served in January with positive preg. check by parity

I want to know the number of females served in January, by parity 0 and by parity > 0. Only include females that have a positive pregnancy check.

Use the Breakdown report designer. The setup screen is shown below:

Table:	FEMALEX
Variable:	PARITY
Classes:	0 1:
Variables to Analyze:	ID
Functions:	Count
Filtering:	REPROSTATUS=3 AND SERVDATE BETWEEN '2005-1-1' AND '2005-1-31'

The Breakdown report is shown below:



19.2.3.21 Age at death of pre-weaned animals

I want to know the number and percent of pre-weaned animals that died at <2 days of age by farrowing room in the first 6 months of 2003.

The setup screen for Query report is shown below:

Tables: PWDEATHEX

Columns: BIRTHLOC1 (Group=Yes), BIRTHLOC2 (Group=Yes), PWDNUMBER (Function=Sum), RECORDEDPWDEATHS

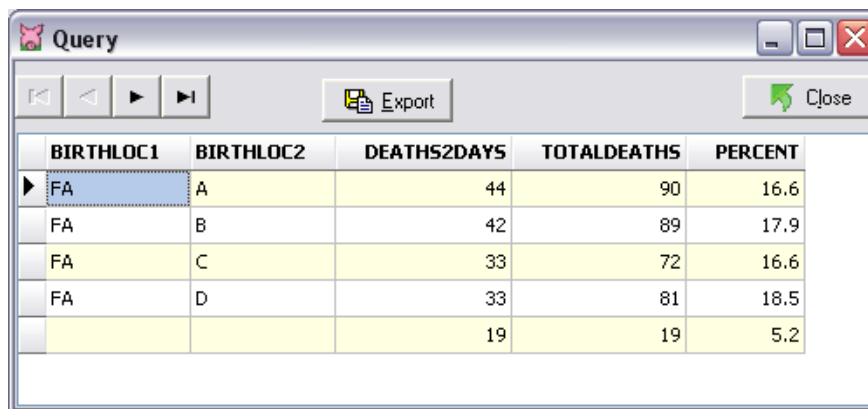
Criteria: PWDDAYS<2 AND BIRTHINGDATE BETWEEN '2003-1-1' AND '2003-5-31'

Sorting:

Or you can use SQL directly:

```
SELECT BIRTHLOC1, BIRTHLOC2,
SUM(PWDNUMBER) AS DEATHS2DAYS,
SUM(RECORDEDPWDEATHS) TOTALDEATHS,
100.0*SUM(PWDDAYS)/SUM(RECORDEDPWDEATHS) AS PERCENT
FROM PWDEATHEX
WHERE PWDDAYS<2
AND BIRTHINGDATE BETWEEN '2003-1-1' AND '2003-5-31'
GROUP BY BIRTHLOC1, BIRTHLOC2
```

The Query report is shown below:



BIRTHLOC1	BIRTHLOC2	DEATHS2DAYS	TOTALDEATHS	PERCENT
FA	A	44	90	16.6
FA	B	42	89	17.9
FA	C	33	72	16.6
FA	D	33	81	18.5
		19	19	5.2

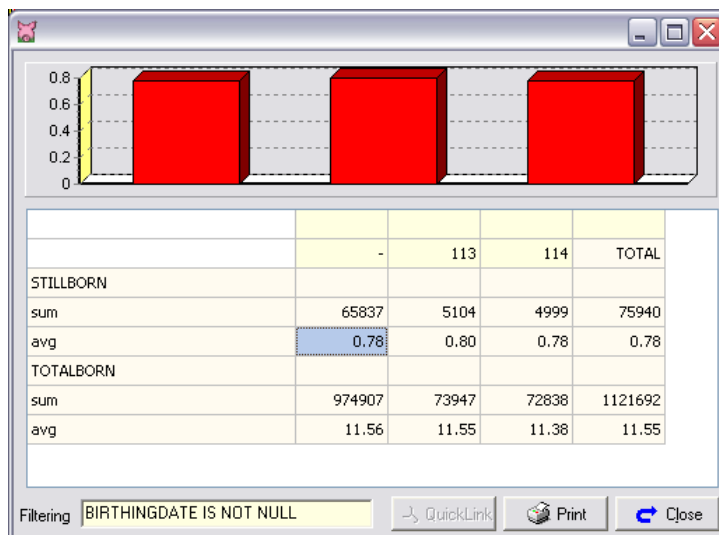
19.2.3.22 Average number and % of stillborns born to females induced to farrow

I want to know the average number and percent of stillborns born to females induced to farrow at 113 and 114 days of gestation, and also not induced.

The setup screen for Breakdown report is shown below:

Table:	PARITYEX
Variable:	INDUCED
Variables to Analyze:	STILLBORN TOTALBORN
Functions:	Sum, Arithmetic Mean
Filtering:	BIRTHINGDATE IS NOT NULL

The Breakdown report is shown below:



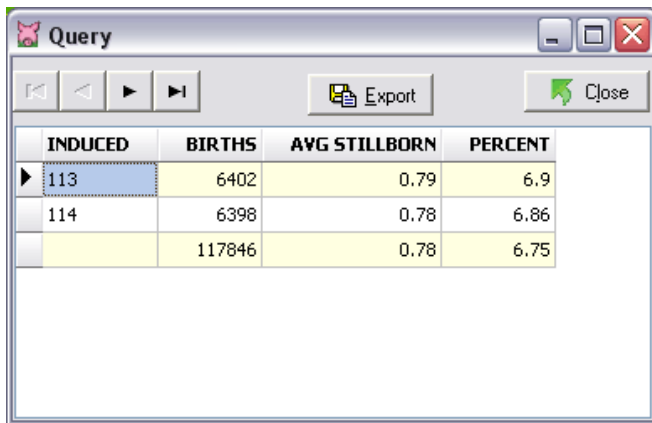
Another option is to use the Query report. The setup screen for Query report is shown below:

Tables:	PARITYEX
Columns:	INDUCED (Group=Yes), STILLBORN (Function=Avg), TOTALBORN (Function=Avg)
Criteria:	
Sorting:	

Or you can use SQL directly:

```
SELECT INDUCED,
COUNT(*) AS BIRTHS,
AVG(1.00*STILLBORN) AS AVG_STILLBORN,
100.00*SUM(STILLBORN) / SUM(TOTALBORN) AS PERCENT
FROM PARITYEX
GROUP BY INDUCED
```

The Query report is shown below:



INDUCED	BIRTHS	AVG STILLBORN	PERCENT
113	6402	0.79	6.9
114	6398	0.78	6.86
	117846	0.78	6.75

19.2.3.23 Distribution of removed females by parity

I want to see the distribution of removed females by parity within the year 2004.

Use the Histogram report designer. The setup screen is shown below:

Tables: FEMALEX

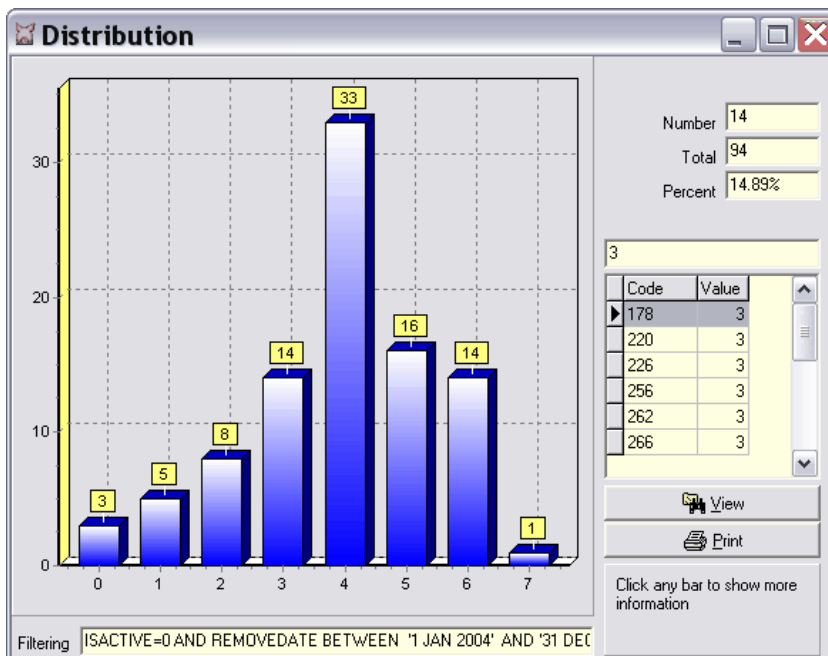
Variable: PARITY

Filtering: ISACTIVE=0 AND REMOVEDATE BETWEEN '1 JAN 2004' AND '31 DEC 2004'

Axis Automatic Scale

Type:

The Histogram report is shown below:



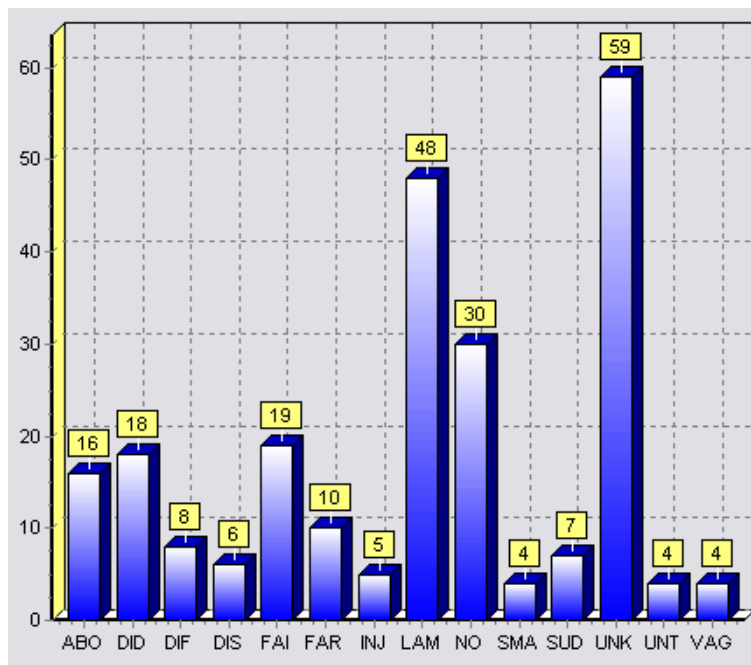
19.2.3.24 Distribution of removed females by removal reason

I would like to look at the females that have been removed from the herd by removal reason, during January and February of 2002.

The setup screen for Histogram report is shown below:

Table: FEMALEEX
Variable: REMOVE REASON
Filtering: REMOVEDATE BETWEEN '2001 JAN 01' AND '2001 FEB 28'
Axis: Automatic Scale

The Histogram report is shown below:



Another options is to use the Query report. The setup screen for Query report is shown below:

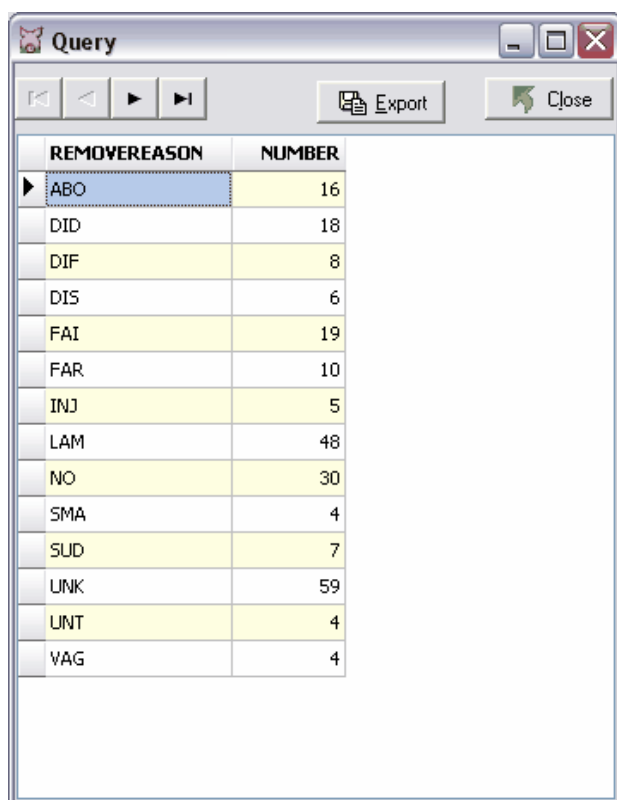
Tables: FEMALEEX
Columns: REMOVE REASON (Group=Yes), ID (Function=Count)
Criteria: REMOVEDATE BETWEEN '2001 JAN 01' AND '2001 FEB 28'

Or you can use directly SQL:

```
SELECT REMOVE REASON, COUNT ( * )
```

```
FROM FEMALEEX
WHERE
REMOVEDATE BETWEEN '2001 JAN 01' AND '2001 FEB 28'
GROUP BY REMOVEREASON
```

The Query report is shown below:



The screenshot shows a window titled 'Query' with a toolbar containing navigation arrows, an 'Export' button, and a 'Close' button. Below the toolbar is a table with two columns: 'REMOVEREASON' and 'NUMBER'. The table contains 15 rows of data. The first row is highlighted with a blue background.

REMOVEREASON	NUMBER
ABO	16
DID	18
DIF	8
DIS	6
FAI	19
FAR	10
INJ	5
LAM	48
NO	30
SMA	4
SUD	7
UNK	59
UNT	4
VAG	4

19.2.3.25 Comparing a treatment group to a control group

I would like to flag females for reporting results for using a certain product. For example: EZ Breed Top Dresser is a product used to increase conception rates, born alive, increase weaning weights, etc. If a number of females were treated with this product, I want to compare these females against a control group.

There are several ways to do this in Porcitech. One way is to use the User Field A1 of the female status sheet to flag them. Go to Females file and set a tag in the User Field A1 to create a group of females, for example **EZ2006** to denote the EZ treatment applied in year 2006 (you can use any tag).

When the test period is finished, you can get the results using some of the pre-defined reports or creating your own consults.

A very important report is Performance Analysis. Go to **Reports | Analysis | Performance Analysis**. You have 2 options:

1. Compare each group side by side within a period of time: In **Breakdown** box, select **User Field A1**.
2. To filter by group and show several periods of time: In **Breakdown** box, select Periods, In **Filtering** box enter the tag that you used in User Field A1 to define the group.

You can increase the complexity of the consult as grouping tags, filtering by parity, etc.

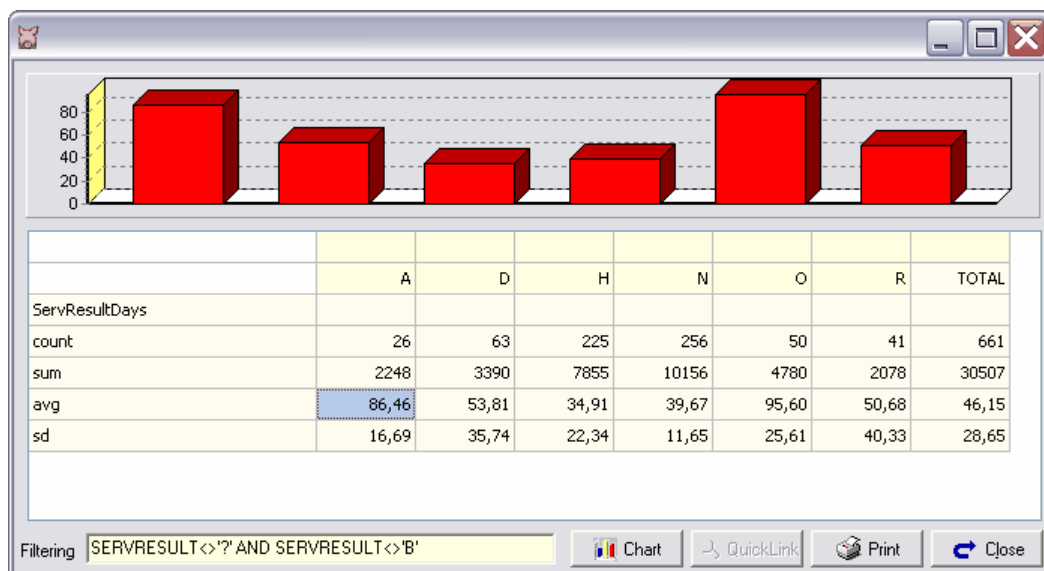
19.2.3.26 Fail to farrowing breakdown

I would like to break down all the categories of non productive days to see if we can help the farms be more productive. In particular, the days from service to not-farrowing, served within the year 2006.

Use Breakdown report designer. The setup screen is shown below:

Tables: SERVICEEX
Variable: SERVRESULT
Variables to Analyze: SERVRESULTDAYS
Functions: Count, Sum, Arithmetic Mean, Standard Deviation
Filtering SERVRESULT<>'#Unknown#' AND SERVRESULT<>'#Birthing#' AND SERVDATE>='1 JAN 2006' AND SERVDATE<'31 DEC 2006'

The Breakdown report is shown below:



19.2.3.27 Farrowing rate by entry date

I want to know the farrowing rate by entry date. Females with the same entry date are considered a cohort.

Use Breakdown report designer. The setup screen is shown below:

Tables: ServiceEx
Variable: EntryDate
Variables to Analyze: ServBirthing
Functions: Arithmetic Mean
Filtering

19.2.3.28 Farrowing rate by service day

I want to know the farrowing rate by service day of the week (Sunday, Monday, ...) of all services within the year 2006.

Note: The weekdays will be defined by a number on the report, Sunday=0, Monday=1 ... Saturday=6.

Use Breakdown report designer. The setup screen is shown below:

Tables: ServiceEx
Variable: EXTRACT(WEEKDAY FROM ServDate)
Variables to Analyze: ServBirthing
Functions: Arithmetic Mean, Standard Deviation
Filtering ServDate BETWEEN '1 JAN 2006' AND '31 DEC 2006'

19.2.3.29 Abortions by days of gestation

I would like to see a breakdown of abortions by days of gestation in 2007.

The setup screen for Histogram report is shown below:

Table: ServiceEx
Variable: ServResultDays
Filtering: ServResult='#Abortion#' AND ServDate BETWEEN '1JAN2007' AND

'31DEC2007'
Axis: Uniform Scale

Note: If you want to define the category of days by 2 or more classes or groups, (for example, before 30 days and after or equal to 30 days from service), select **Free Scale** and enter **Classes** like the following ranges **0:29 30:**

19.2.3.30 Distribution of treatments by treatment name

I would like to see the distribution of the number of treatments by treatment name during 2007.

The setup screen for Histogram report is shown below:

Table: Treatment
Variable: TreatName
Filtering: TreatDate BETWEEN '1JAN2007' AND '31DEC2007'
Axis: Automatic Scale

19.2.3.31 Lactation feed intake on subsequent litter size

I want to know the effect of average lactation feed intake on subsequent litter size, from 2000 to end of 2007. I use the Feed In event in Females file. The average feed intake is defined as the sum of the weight of feed in all Feed In events during lactation divided by the number of days of lactation.

Use Query report designer. In this case, we use three joined tables (current parity, next parity and feed event). The SQL statement is shown below:

```
SELECT
NextParity.Totalborn as NextTotalBorn,
SUM(FeedIn.Weight)/ParityEx.LactationLen AS AvgFeedIntake FROM
ParityEx
JOIN Parity NextParity ON NextParity.IID_Parity=ParityEx.IID_NextParity
JOIN FeedIn ON FeedIn.IID_Master=ParityEx.IID_Female
WHERE FeedIn.FeedDate BETWEEN ParityEx.BirthingDate AND ParityEx.
EndLacDate
AND ParityEx.BirthingDate BETWEEN '1JAN2000' AND '31DEC2007'
GROUP BY NextParity.Totalborn, ParityEx.LactationLen
ORDER BY NextParity.Totalborn
```

19.2.3.32 Average parity of removed females by age at first service

What is the average parity of removed females by age at first service in 2007.

Use Breakdown report designer. The setup screen is shown below:

Tables: FemaleEx
Variable: Serv1Age
Variables to Analyze: CurParity
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering RemoveDate BETWEEN '1 JAN 2007' AND '31 DEC 2007'

Use the **Classes** box to categorize the breakdown. See Defining ranges. For example, you can enter:

0:220 221:230 231:240 241:250 251:260 261:270 271:280 281:290 291:

19.2.3.33 Total born litter size of females served more than 7 days after weaning

I want a breakdown by parity of average total born litter size of females with a previous lactation length between 17 and 21 days and wean1stservint >7 in 2007.

Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ServiceResult
Variable: Parity
Variables to Analyze: TotalBorn
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering WeanFstServ>7 AND LactationLen BETWEEN 17 AND 21 AND BirthingDate BETWEEN '2007/1/1' AND '2007/12/31'

Use the **Classes** box to categorize the breakdown. See Defining ranges.

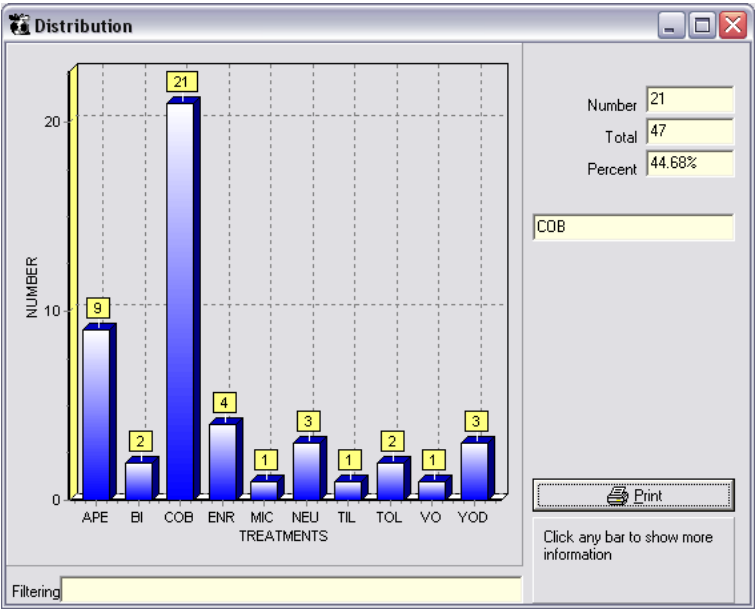
19.2.3.34 Treatments within 30 days after farrowing

I want to know the number and percentage of all treatments applied to females within 30 days after farrowing. Only include year 2004.

Use the Histogram report designer. The setup screen is shown below:

Tables: TREATMENTEX
Variable: TREATNAME
Filtering: TREATDATE-BIRTHINGDATE BETWEEN 0 AND 30 AND BIRTHINGDATE BETWEEN '2004-1-1' AND '2004-12-31'
Axis Automatic Scale
Type:

The Histogram report is shown below:



19.2.3.35 Age at first heat not served

I want to know the number of Heat Not Served events by age. Only include year 2004.

Use the Histogram report designer. The setup screen is shown below:

Tables: ParityEx

Variable: FstHNSDate - BirthDate

Filtering: FstHNSDate BETWEEN '2004-1-1' AND '2004-12-31'

Axis Type: Uniform Scale (select the desired minim, maximum an interval values)

19.2.3.36 Average lactation feed intake on wean to first service interval

I want to see average lactation feed intake on wean to first service interval.

Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ParityEx
Variable: WeanFstServ
Variables to Analyze: LactationFeedIn
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering

Use the **Classes** box to categorize the breakdown. See Defining ranges.

19.2.3.37 Effect of lactation feed intake on subsequent litter size

I want to see the effect of lactation feed intake on subsequent litter size.

Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ParityEx F JOIN ParityEx L ON F.IID_NextParity=L.IID_Parity
Variable: L.Liveborn
Variables to Analyze: F.LactationFeedIn
Functions: Count, Arithmetic Mean, Standard Deviation
Filtering

Note that this breakdown uses the lactation feed intake from the current parity, but the liveborn from the next parity. It joins two parity records using the JOIN SQL operator in the **Table** parameter.

Use the **Classes** box to categorize the breakdown. See Defining ranges.

19.2.3.38 Average lactation feed intake by time period

I want to see average lactation feed intake per day by time period

Use [Breakdown report designer](#). The setup screen is shown below:

Tables: ParityEx
Variable: BirthingDate
Columns are time periods: On
Variables to Analyze: LactationFeedIn / LactationLen

Functions: Count, Arithmetic Mean

Filtering

19.2.3.39 Entry to service histogram

I would like to see the number of unmated females served by entry to 1st serve interval in 10 day increments like 0-10, 11-20, 21-30, etc.

Use the Histogram report designer. The setup screen is shown below:

Tables: FemaleEx

Variable: P0FstServDate-EntryDate

Filtering:

Axis Uniform Scale (select the desired minim, maximum an interval values)

Type:

19.2.4 Crosstab

19.2.4.1 Number of females by parity and genetics

I would like to see the number of active females by parity and genetics.

The setup screen for Crosstab report is shown below:

Table:	FEMALEEX
Column Variable:	CURPARITY
Row Variable:	GENETICS
Filtering:	ISACTIVE=1

Note: You can use **Classes** to reduce the number of columns or rows of the parity or age.

19.2.4.2 Number of males by entry date and genetics

I would like to see the number of males entered by date and by genetics.

The setup screen for Crosstab report is shown below:

Table:	Male
Column Variable:	EntryDate
Columns are Time Periods:	On
Row Variable:	Genetics
Filtering:	

19.2.4.3 Number of females by parity and age

I would like to see the number of active females by parity and age (months) .

The setup screen for Crosstab report is shown below:

Table:	FEMALEEX
Column Variable:	CURPARITY
Row Variable:	(CURRENT_DATE-BIRTHDATE)/30
Filtering:	ISACTIVE=1

Note: You can use **Classes** to reduce the number of columns or rows of the parity or age.

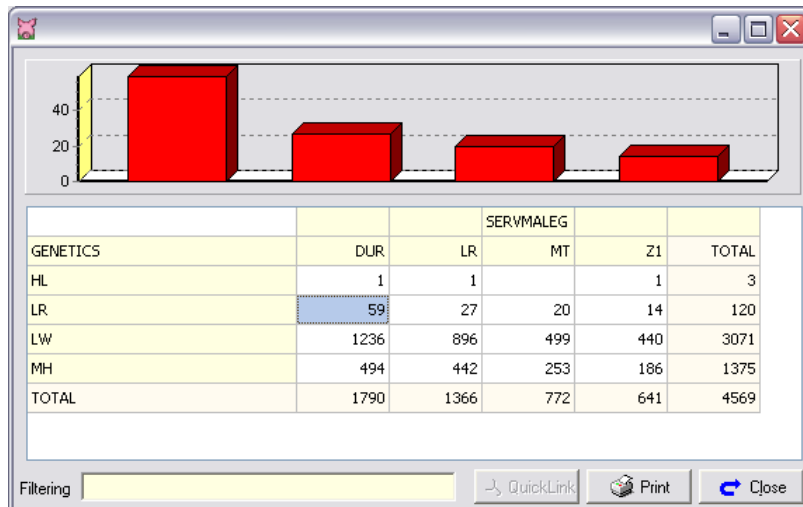
19.2.4.4 Number of litters born by genetic line

On our multiplier farms we want to know how many litters of a particular genetic line we can expect to be born at any given time. For example, if we mate a LW female with semen from a LR boar, the outcome of this cross would be a MH animal. We would like to know how many MH litters are expected to be born at any given time.

The setup screen for Crosstab report is shown below:

Table: PARITYEX
Column Variable: SERVMALEGENETICS
Row Variable: GENETICS
Filtering: BIRTHINGDATE BETWEEN '2003 JAN 01' AND '2003 JUN 30'

The Crosstab report is shown below:



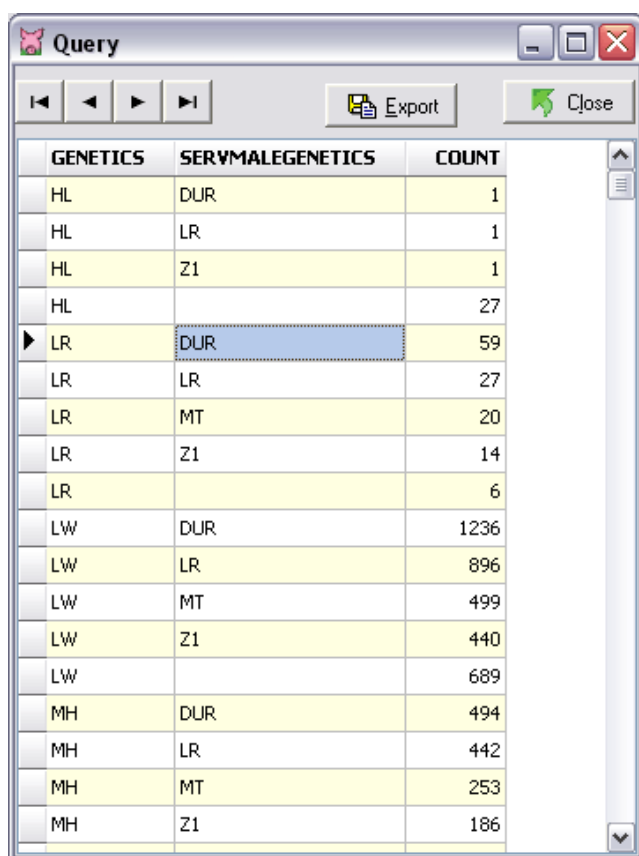
Another option is to use the Query report. The setup screen for Query report is shown below:

Tables: PARITYEX
Columns: GENETICS (Group=Yes), SERVMALEGENETICS (Group=Yes),
 BIRTHINGDATE (Function=Count)
Criteria: BIRTHINGDATE BETWEEN '2003 JAN 01' AND '2003 JUN 30'
Sorting:

Or you can use SQL directly:

```
SELECT GENETICS, SERVMALEGENETICS, COUNT(*) FROM PARITYEX
WHERE BIRTHINGDATE BETWEEN '2003 JAN 01' AND '2003 JUN 30'
GROUP BY GENETICS, SERVMALEGENETICS
```

The Query report is shown below:



Query window showing a table with columns: GENETICS, SERVM, MALE, GENETICS, and COUNT. The table lists various genetic combinations and their counts. The row for LR, DUR is highlighted.

GENETICS	SERVM	MALE	GENETICS	COUNT
HL		DUR		1
HL		LR		1
HL		Z1		1
HL				27
▶ LR		DUR		59
LR		LR		27
LR		MT		20
LR		Z1		14
LR				6
LW		DUR		1236
LW		LR		896
LW		MT		499
LW		Z1		440
LW				689
MH		DUR		494
MH		LR		442
MH		MT		253
MH		Z1		186

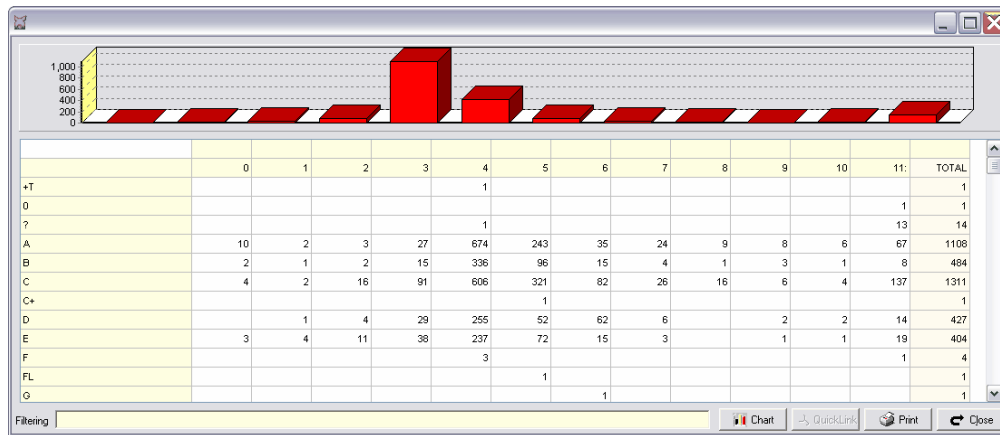
19.2.4.5 Wean to 1st service by technician

We want to know the wean to 1st service interval by technician for the years 2005 and 2006. We want to know if any technicians are serving females before they are actually in heat.

The setup screen for Crosstab report is shown below:

Table: ServiceResult
Column Variable: PrevEndLacFstServ
Column Classes: 0..10 11:
Row Variable: ServTech1
Filtering: ServDate BETWEEN '2005-1-1' AND '2006-12-31'
 AND PrevEndLacFstServ IS NOT NULL

The Crosstab report is shown below:



Wean to first service interval is placed in the horizontal axis with 0,1,2,3,4,5,6,7,8,9 10, 11 or more days.
 Technicians IDs are placed in the vertical axis.

19.2.4.6 Days of week for service and farrowing

For wean planning purposes, I want to know how many females were served on the same day of the week that they farrowed in the year 2006.

The setup screen for Crosstab report is shown below:

Table: ServiceResult
Column Variable: EXTRACT(WEEKDAY FROM ServDate)
Row Variable: EXTRACT(WEEKDAY FROM BirthingDate)

Filtering: ServDate BETWEEN '2006-1-1' AND '2006-12-31'
AND BirthingDate IS NOT NULL

19.2.4.7 Female removed by reason and parity crosstab

I want to know the number and percentage by removal reason and parity of females removed in 2006.

The setup screen for Crosstab report is shown below:

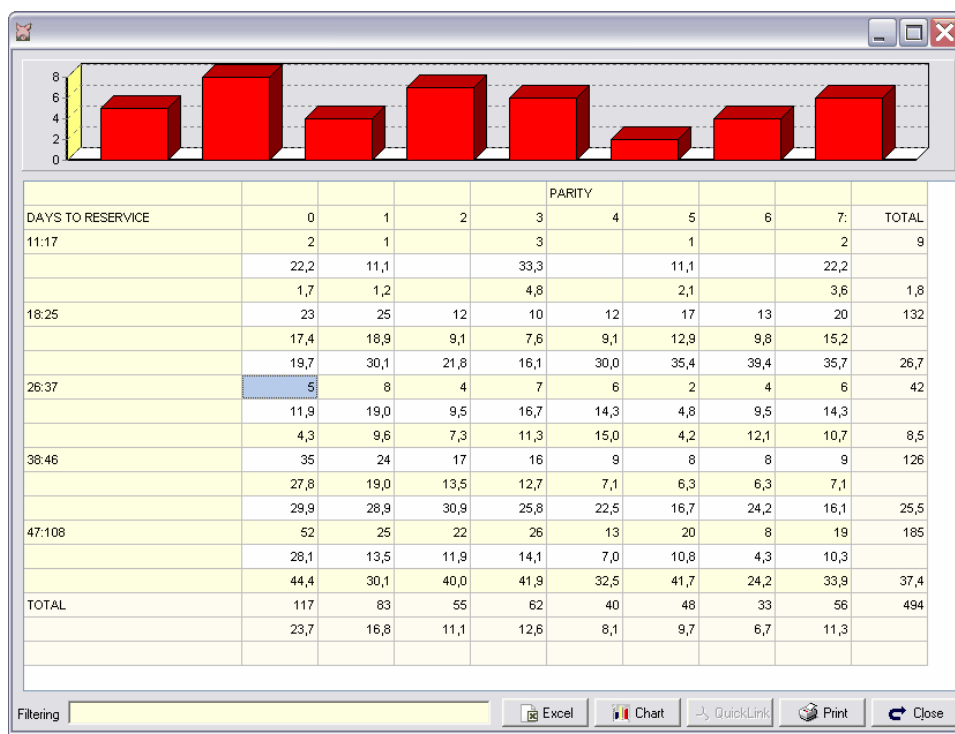
Table: FemaleEx
Column Variable: Parity
Row Variable: RemoveReason
Filtering: RemoveDate BETWEEN '1 JAN 2006' AND '31 DEC 2006'
Percents: On

19.2.4.8 Repeat service by service interval

Of the number of repeat services in 2007, I want to know the breakdown by parity and the interval in days from repeat service to prior service. I want to group the interval in days by 11-17, 18-25, 26-37, 38-46 and 47-108 and use parity breakdown 0,1,2,3,4,5,6, 7+

The setup screen for Crosstab report is shown below:

Table: ServiceEx
Column Variable: Parity
Column Classes: 0..6 7:
Column Title: PARITY
Row Variable: PriorServInt
Column Classes: 11:17 18:25 26:37 38:46 47:108
Column Title: DAYS TO RESERVICE
Filtering: ServDate BETWEEN '1JAN07' AND '31DEC07'
Percents: On



19.3 Preweaned consults

19.3.1 Percent pre-weaning mortality by farrowing room

I want to know the percent pre-weaning mortality by farrowing room in the 6 first months of 2003.

The setup screen for Query report is shown below:

Tables: PARITYEX
Columns: BIRTHLOC1 (Group=Yes)
 BIRTHLOC2 (Group=Yes)
 LIVEBORN (Function=Sum, Alias=Total_Liveborn)
 NETFOSTERED (Function=Sum, Alias=Total_NetFostered)
 TOTALWEANED (Function=Sum, Alias=Total_Weaned)
 $100.0 * (SUM(LIVEBORN + NETFOSTERED - TOTALWEANED)) /$
 $NULLIF(SUM(LIVEBORN + NETFOSTERED), 0) : Mortality (Calculation)$
Criteria: BIRTHINGDATE BETWEEN '2003-1-1' AND '2003-5-31'
Sorting:

Or you can use SQL directly:

```
SELECT BIRTHLOC1, BIRTHLOC2,
SUM(LIVEBORN) AS LIVEBORN,
SUM(NETFOSTERED) AS NETFOSTERED,
SUM(TOTALWEANED) AS WEANED,
100.0 * (SUM(LIVEBORN + NETFOSTERED - TOTALWEANED)) /
NULLIF(SUM(LIVEBORN + NETFOSTERED), 0) AS MORTALITY_RATE
FROM PARITYEX
```

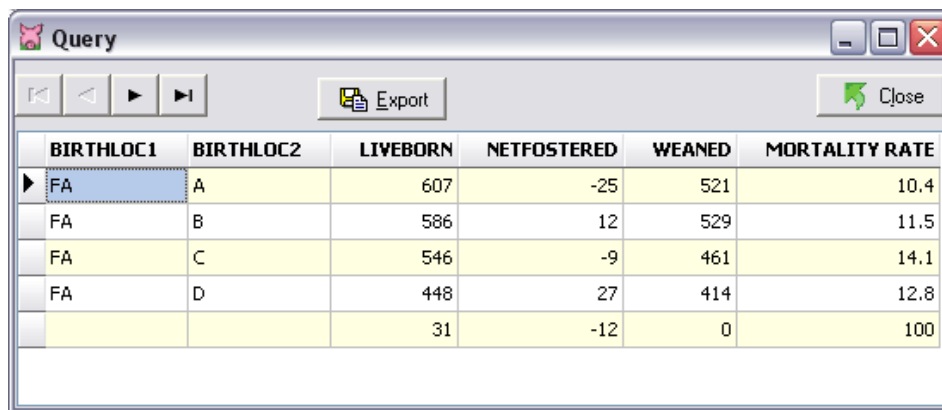


```
WHERE BIRTHINGDATE BETWEEN '2003-1-1' AND '2003-5-31'  
GROUP BY BIRTHLOC1, BIRTHLOC2
```

Notes:

- This script works accurate only if the parity are weaned
- NULLIF sql function avoid the zero division error in the mortality rate divisor
- The mortality rate is calculated via weaneds minus fosters and liveborn

The Query report is shown below:



BIRTHLOC1	BIRTHLOC2	LIVEBORN	NETFOSTERED	WEANED	MORTALITY RATE
FA	A	607	-25	521	10.4
FA	B	586	12	529	11.5
FA	C	546	-9	461	14.1
FA	D	448	27	414	12.8
		31	-12	0	100

19.3.2 List of preweaning deaths

We are going to do a research trial in order to see if we can reduce our preweaning mortality numbers. I want to see a list of preweaning deaths with date, female id, number of deaths, death age, reason and birthing location. I only want to see deaths within December 2004 and death age less than 6 days.

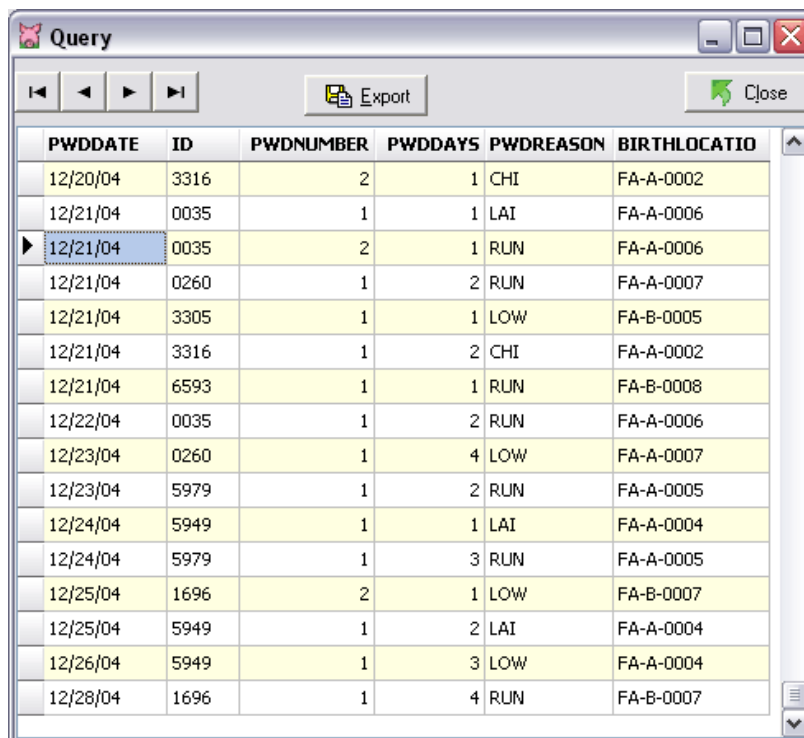
Use [Query report designer](#). The setup screen is shown below:

Tables: PWDEATHEX
Columns: PWDDATE, ID, PWDNUMBER, PWDDAYS, PWDREASON, BIRTHLOCATION
Criteria: PWDDAYS <6 AND PWDDATE BETWEEN '2004-12-1' AND '2004-12-31'
Sorting: PWDDATE, ID

Or you can use directly SQL:

```
SELECT PWDDATE, ID, PWDNUMBER, PWDDAYS,
PWDREASON, BIRTHLOCATION
FROM PWDEATHEX
WHERE PWDDAYS <6 AND
PWDDATE BETWEEN '2004-12-1' AND '2004-12-31'
ORDER BY PWDDATE, ID
```

The Query report is shown below:



The screenshot shows a window titled "Query" with a toolbar containing navigation arrows, an "Export" button, and a "Close" button. Below the toolbar is a table with the following data:

PWDDATE	ID	PWDNUMBER	PWDDAYS	PWDREASON	BIRTHLOCATIO
12/20/04	3316	2	1	CHI	FA-A-0002
12/21/04	0035	1	1	LAI	FA-A-0006
12/21/04	0035	2	1	RUN	FA-A-0006
12/21/04	0260	1	2	RUN	FA-A-0007
12/21/04	3305	1	1	LOW	FA-B-0005
12/21/04	3316	1	2	CHI	FA-A-0002
12/21/04	6593	1	1	RUN	FA-B-0008
12/22/04	0035	1	2	RUN	FA-A-0006
12/23/04	0260	1	4	LOW	FA-A-0007
12/23/04	5979	1	2	RUN	FA-A-0005
12/24/04	5949	1	1	LAI	FA-A-0004
12/24/04	5979	1	3	RUN	FA-A-0005
12/25/04	1696	2	1	LOW	FA-B-0007
12/25/04	5949	1	2	LAI	FA-A-0004
12/26/04	5949	1	3	LOW	FA-A-0004
12/28/04	1696	1	4	RUN	FA-B-0007

19.3.3 Foster reasons

I would like to record the foster reasons in the foster event. Then, I want to get a report between 2 dates, for example the year 2007, displaying total foster breakdown by reason. For now, we manage 3 foster reasons: runt, low viability and litter size.

The Foster event has a user field which you can use to record the reason for fostering. The reason value is recorded in the **UFTText1** field of the **Foster** table.

Use [Breakdown report designer](#). The setup screen is shown below:

Tables:	FOSTER
Variable:	UFTTEXT1
Variables to Analyze:	FOSTERS
Functions:	Count, Sum, Arithmetic Mean, Standard Deviation
Filtering	FODATE BETWEEN '1 JAN 2007' AND '31 DEC 2007'

19.3.4 Average weaning age

The average weaning age is reduced by females that are weaned prematurely because of savaging, poor underline or other problems. So, I want to know the average weaning age only for animals weaned from birth litters at 10 or more days of age, weaned between 2003 and 2004.

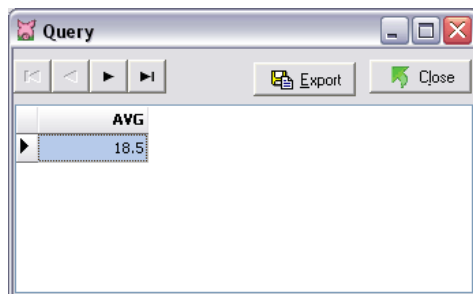
The setup screen for Query report is shown below:

Tables:	PARITYEX
Columns:	WEAN1AGE (Function=Avg)
Criteria:	WEAN1DATE BETWEEN '1JAN2003' AND '31DEC2004' AND WEAN1AGE>=10
Sorting:	

Or you can use directly SQL:

```
SELECT AVG(1.0*WEAN1AGE)
FROM PARITYEX
WHERE WEAN1DATE BETWEEN '1JAN2003' AND '31DEC2004'
AND WEAN1AGE>=10
```

The Query report is shown below:



19.4 Other

19.4.1 Poor condition females

I want to "mark" thin (poor condition) females at weaning. Later I will want to compare the farrowing rate and subsequent litter size of poor condition females with females in good condition. I want services from 2006 to 2008.

For this purpose, you can use the Label event. After the weaning event, you must enter a **Label** with **POOR** as the label value to mark females in poor condition.

Use Breakdown report designer. The setup screen is shown below:

Tables:	ServiceResult
Variable:	IIF(ParityLabels CONTAINING ';POOR;','POOR','REMAINING')
Variables to Analyze:	ServBirthing, TotalBorn
Functions:	Sum, Arithmetic Mean
Filtering	ServDate BETWEEN '2006/1/1' AND '2008/12/31'

19.4.2 Genealogy report up to 6 generations

I want to see a report with 6 generations, showing the female ID and the Register ID.

Porcitech offers functions to create a generation report to any depth. By default, Porcitech includes a genealogy report up to 4 generations. It is a good base from which to create the 6th generation report.

1. Click **Reports** and **General** sheet.
2. Select the **Genealogy** report and click **Design**.
3. Click **Code** sheet.
4. Replace **Genealogy(<FIELDS."IID_MASTER">,4,'vector');** by **Genealogy (<FIELDS."IID_MASTER">,6,'vector');** specifying to analyze 6 generations instead of the current 4.
5. Click **Page1** sheet.
6. Using the mouse, arrange the boxes to fit 2 generations more.
7. To add a new item, click **Text object** button (A) in the left panel. Move the mouse to the paper and click again to leave the **Text object**.
8. Type the expression in the **Text** sheet of the **Memo** dialog. For example **[VectorVar('vector', 'PPPM', 'Id')]** to show the ID of the paternal - paternal -paternal -grandam (PPPM). Use **'RegisterId'** instead of **'Id'** to show the **Register Id**.
9. Click OK to close the **Memo** dialog.
10. Repeat steps 7, 8 and 9 for each item.
11. Click **File** and **Save** to save the report to the user folder.

19.4.3 Track activity query

The Track Activity option records the changes made in events. Any change is tracked in a table called LOG. You can consult the table using the Query wizard, in **Reports | New**.

For example:

```
SELECT * FROM Log ORDER BY LDate
```

Displays date, hour, user and description of each change, sorted by date.

```
SELECT * FROM Log
WHERE luser='JohnDoe' AND LDate BETWEEN '2006-1-1' AND '2006-1-31'
ORDER BY LDate
```

Displays the log data for the user 'JohnDoe' in January 2006.

```
SELECT
EXTRACT(YEAR FROM LDate) AS lyear,
EXTRACT(MONTH FROM LDate) AS lmonth,
luser,
COUNT(*)
FROM log
GROUP BY 1,2, luser
ORDER BY 1,2, luser
```

Displays the number of changes by user and month.

19.4.4 Serology results

I want to enter serology results of blood samples. For any animal we will be taking random blood samples. We send these samples to a diagnostic lab for serology tests. After the tests are run they send us back the results. For any animal, we want to enter:

For each test: Sample collection date, Test, Test method, Test date.

For each animal: Animal Id, Specimen, Titer, Result.

Defining the User event to enter the serology data

Serology event is not contemplated by Porcitech, so it is necessary to use a User Event.

1. Go to **Options, Events Fields, Females** and click **User Event 1**

2. Click **New Fields** button

3. Define and active the following fields:

Field	Label
Text1	Test

Text2	Test Method
Text3	Specimen
Text4	Result
DateTime1	Test Date

Entering the data

To enter the data, in this case the best way is using the Batch Data Entry. For example:

1. Click **Event Data Entry** and select **Batch**
2. Click **Sheet** and select **User Event 1**
3. Fill **Date**, **Test**, **Test Method** and **Test Date** in the first row
4. Click **Fill-In** button and click **Duplicate**
5. Enter the number of samples minus one and click **Ok**
6. Complete the grid entering Animal Id, Specimen, Titer and Result for each row
7. Click **Process** button

Creating the report

You can use several report designers (query, list data, breakdown, ...) according what you need to study. To get a simple list of the record, you must use EventRecord table. For example, a simple list between 1 May 2007 and 31 December 2007:

1. Go to **Reports**, click **New**, select **Query** report designer.
2. Enter the following SQL statement:

```
SELECT EvDate, ID, EvText1, EvText2, EvText3, EvText4, EvDateTime1 FROM EventRecord
WHERE EvType='UserEvent1' AND EvDate BETWEEN '1MAY07' AND '31DEC07' ORDER BY EvDate,
ID
```
3. Click **Preview** button to see the preview.

19.4.5 Homozygous recessive gene list

We do a test to detect a homozygous recessive gene in prospective breeding animals. Therefore the dam and sire are also carriers. When the test is positive, we want to mark the individual and the sire and dam. Finally, we want a list of all animals that are carriers of this recessive gene.

Defining an user field to mark animals

For this purpose, you can use the User field called **Bool1** in **Individual Pig Records** file, female file and male file.

1. Go to **Individual Pig Records** file and click the **User** sheet
2. Click **New Fields**
3. Check **On** the first **Yes/No** box

4. Enter **Recessive Gene** in the right **Title** cell
5. Repeat the above steps for **Female** and **Male** files

Defining the genetic test event

It is necessary to define a user event to enter the genetic test results in **Individual Pig Records** file

1. Go to **Options, Event Fields** and click **Individual Records**
2. Click **User Event 1**
3. Enter **Recessive Gene Detected** in **Name**
4. Select **Bool1** in **Individual, Dam and Sire**
5. Click **Ok** to save the data

Entering the genetic tests

To mark the animals, you need to use the **User Event 1** in **Event Entry** or **Individual Pig Records** file. When the **User Event 1** is entered, automatically Porcitech assigns "true" to the user field **Bool1** in the individual file, dam file, and sire file.

Creating the report

To get a simple list of the animals marked with the recessive gene, you must use the filter **Bool1='T'** for true. For an example, using SQL:

```
SELECT * FROM Individual WHERE Bool1='T'
```

19.4.6 User field duplications

I use the User Field Text 1 as a third identification of my breeding females. I want to check that all IDs are unique in the entire database in case I enter duplicates by error.

Using SQL:

```
SELECT F1.Text1, F1.Id FROM FEMALE F1
JOIN
(SELECT Text1 FROM FEMALE GROUP BY Text1 HAVING COUNT(*)>1) F2
ON F1.Text1=F2.Text1
ORDER BY F1.Text1, F1.Id
```

Also, you can use:

```
SELECT Text1, LIST(ID) FROM female
GROUP BY Text1
HAVING COUNT(*)>1
```


Top Level Intro

This page is printed before a new
top-level chapter starts

Part



20 Multi-farm analysis

20.1 Multi-farm analysis

Agritec provides you with a powerful set of tools to work in a multi-farm environment. The multi-farm analysis feature is only available with Porcitech Enterprise Edition and only available for some reports. Porcitech includes features to generate comparisons or consolidations between several farms by period of time, parity, genetics, or other breakdown. It can group and consolidate farms and compare them to other groups of farms. You can customize the benchmarking reports, by adding new expressions, changing the terminology, or filtering by any criteria.

There are two types of multi-farm reports:

- **Consolidation:** Two or more farms are summed or merged.
- **Comparative:** Farms are compared side by side using columns. Each column can be a farm or a group of consolidated farms.

There are two ways to get multi-farm analysis:

Porcitech for desktop

Porcitech for desktop includes multi-farm features. See Multi-farm analysis with multiple databases

Agritec Online

Porcitech for desktop includes multi-farm features, but Agritec offers another and more powerful alternative based in the Web. A digital dashboard is a business management tool used to visually ascertain the status (or "health") of your business enterprise through key performance indicators. Agritec Online uses visual, at-a-glance displays of data pulled from disparate production systems to provide flags, action notices, next steps, multi-farm analysis, and summaries of farm systems.

See Agritec Online

20.2 Multi-farm analysis with multiple databases

Each farm is a separate database. All codifications and options are created uniquely for each farm.

How to do a comparative between farms.

In a comparative report you are comparing the performance between farms. Each farm, or database, is a column.

1. Go to **Reports menu**, **Breeding Statistics** sheet, and then double click **Performance Analysis** report, or click **Open**.
2. In the **Breakdown** box, select **Databases**.
3. In the **Value** box, you have several options to choose from:
 - **All** will select all databases in the directory. Each database will be a column on the report.
 - **Select Multiple** will open up another screen where you can select multiple databases of your choosing. Click the farm database you want to add to your report, then click the **Add** button. You can add as many as you choose.

- **Range** gives you the option to consolidate some farms while comparing to another. For example, entering **FARM1 FARM2 FARM3:FARM4** in the **Ranges** box would show 3 columns on the report. The first column is farm FARM1, the second is farm FARM2, and the third is the consolidated results of farms FARM3+FARM4.

How to do a consolidation analysis report

1. Go to **Reports, Analysis** and then double click in **Performance Analysis** report.
2. In the **Breakdown** box, select the desired breakdown (dates, parity, ...)
3. Click the **Filters** sheet.
4. Select **Databases** in the **Select Filter Option**.
5. In the Value box, you can select the databases to merge.

20.3 Agritec Online

Agritec Online is a Web based data management tool developed for companies managing multiple farms. It offers intra-company benchmarking, dashboard, custom design reporting, and customized data distribution and collection.

You can see more information at http://agritecsoft.com/en/porcitec/agritec_online.php

20.4 Uploading the Web server data from the desktop application

The Agritec Online system manages two types of reports: single farm level for farm-specific reporting, and multiple farm level for comparing and consolidating farms.

Examples of single farm level reports are female history cards, management reports, lists of deaths, event lists, etc.

Examples of multi-farm level reports are Performance Analysis and Benchmarking:

DEMO VERSION



Benchmarking

DATE BETWEEN 1/1/2009 AND 3/31/2009

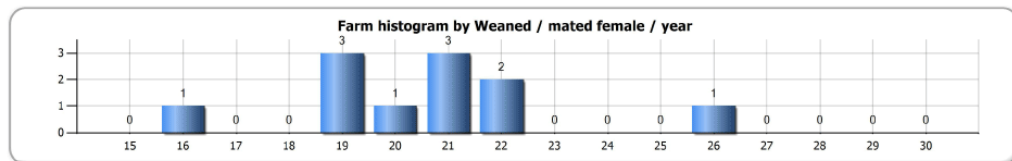
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Ver: 1.0.0 Alfa
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Quantiles											
Farm name	Avg mated female inventory	Weaned / mated female / year	Litters / mated female / year	Average parity	Farrowing rate	Farrowing interval	Totalborn per farrow	Liveborn per farrow	Pigs weaned per litter	Preweaning mortality rate (period)	Weaning-1st service interval
Upper 10%	3.631	25,37	2,51	2,40	90,11	142,19	12,66	11,62	9,94	11,58	5,49
Upper 25%	6.783	23,66	2,41	2,84	87,38	145,94	12,83	11,38	9,79	13,38	5,86
Upper 50%	15.579	22,16	2,40	3,27	87,06	146,20	13,18	11,48	9,51	18,21	6,17
Average	25.778	20,54	2,35	3,39	82,83	147,45	12,76	11,12	9,26	18,64	6,61
Lower 50%	10.198	18,08	2,28	3,59	76,85	149,47	12,07	10,53	8,82	19,43	7,34
Lower 25%	6.732	17,13	2,28	3,57	74,71	149,61	11,78	10,36	8,61	19,72	7,66
Lower 10%	3.395	15,65	2,33	3,55	70,86	150,00	10,80	10,10	8,35	17,41	6,58

Farm Ranking: Ranked by weaned / mated female / year

Farm name	Avg mated female inventory	Weaned / mated female / year	Litters / mated female / year	Average parity	Farrowing rate	Farrowing interval	Totalborn per farrow	Liveborn per farrow	Pigs weaned per litter	Preweaning mortality rate (period)	Weaning-1st service interval
Farm K	2.900 40%	26,17 100%	2,52 100%	2,22 0%	91,22 100%	141,74 0%	12,64 30%	11,74 50%	10,13 100%	10,44 0%	5,63 20%
Farm B	730 20%	22,20 90%	2,47 90%	3,12 10%	86,01 70%	144,13 20%	12,73 40%	11,15 70%	9,15 30%	16,56 40%	4,86 0%
Farm I	3.153 70%	21,70 80%	2,29 30%	3,40 20%	84,19 60%	150,21 60%	13,05 60%	11,08 60%	9,59 60%	15,69 30%	6,35 40%
Farm C	2.387 30%	21,29 70%	2,39 80%	3,42 30%	83,62 40%	142,27 10%	14,21 100%	12,80 100%	9,42 70%	27,53 100%	5,35 10%
Farm J	3.224 90%	21,01 60%	2,39 70%	3,80 90%	87,42 80%	148,27 40%	13,34 90%	11,28 80%	9,25 50%	19,83 80%	6,78 60%
Farm E	3.185 80%	20,76 50%	2,37 60%	3,52 40%	88,77 90%	147,37 30%	12,98 70%	10,88 40%	9,22 40%	19,47 70%	6,90 80%
Farm G	3.146 60%	19,99 40%	2,30 40%	3,63 80%	83,86 50%	148,88 50%	12,85 50%	10,95 50%	9,26 60%	19,33 60%	6,82 70%
Farm A	320 0%	19,13 30%	2,25 20%	3,55 60%	58,72 0%	152,81 100%	10,54 0%	9,91 0%	8,53 10%	14,79 20%	6,09 30%
Farm F	321 10%	18,95 20%	2,08 0%	3,89 100%	77,06 20%	149,75 70%	11,33 20%	10,85 30%	9,49 80%	11,14 10%	14,42 100%
Farm H	3.016 50%	18,61 10%	2,24 10%	3,57 70%	79,25 30%	149,16 60%	12,91 60%	10,59 10%	8,78 20%	22,57 90%	7,97 90%
Farm D	3.395 100%	15,65 0%	2,33 50%	3,55 50%	70,86 10%	150,00 80%	10,80 10%	10,10 10%	8,35 0%	17,41 50%	6,58 50%



or Benchmarking Groups:

DEMO VERSION

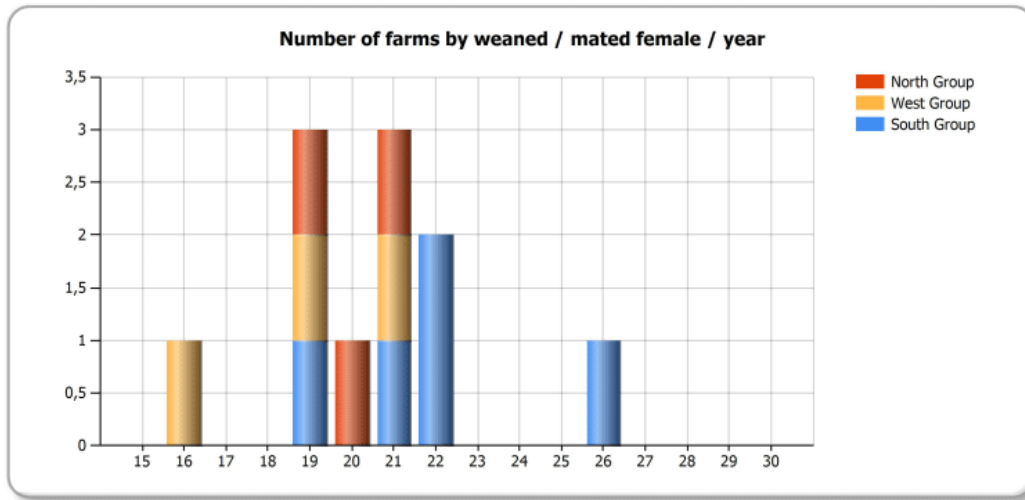


Benchmarking Groups

DATE BETWEEN 1/1/2009 AND 3/31/2009

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Farm name	Avg mated female inventory	Weaned / mated female / year	Average parity	Farm group	Group Percentile	Global Percentile
Farm K	2.900	26,17	2,22	South Group	100,00%	100,00%
Farm B	730	22,20	3,12	South Group	75,00%	90,00%
Farm I	3.153	21,70	3,40	South Group	50,00%	80,00%
Farm C	2.387	21,29	3,42	West Group	100,00%	70,00%
Farm J	3.224	21,01	3,80	South Group	25,00%	60,00%
Farm E	3.185	20,76	3,52	North Group	100,00%	50,00%
Farm G	3.146	19,99	3,63	North Group	50,00%	40,00%
Farm A	320	19,13	3,55	West Group	50,00%	30,00%
Farm F	321	18,95	3,89	North Group	0,00%	20,00%
Farm H	3.016	18,61	3,57	South Group	0,00%	10,00%
Farm D	3.395	15,65	3,55	West Group	0,00%	0,00%

The data used by these two type of reports is fed by the desktop application. The desktop application has two corresponding modes for updating the data placed in the Web server:

1. Update Web Datamart (under File menu)
2. Export Detailed Databases to Web (under File menu)

Update Web DataMart

The desktop application sends only an extract, or summary, of the database to the server. It does not send detailed information such as all events or female Ids. Most single farm-level reports cannot be generated, but multi-farm reports and some herd performance reports are fed by this information. This mode is fast and consumes few resources. It is used for Benchmarking reports.

Export Detailed Databases to Web

The desktop application exports the entire database to the Web server. The Web server can run all farm-level reports. This mode is slower and consumes more resources because all data is exported, not just

a summary. Use this mode if you want to run all reports from the internet.

Which mode do I need to use?

Both modes are useful, depending on the scenario. If a bureau desires to share the reports with their customers, complete database mode is necessary. In this way, customers can get any report or list.

For a company with multiple locations, both modes are necessary. They may want to run farm-level reports, and also a benchmarking or consolidation report for several farms.

If you only need to see the herd performance or benchmarking reports for one or multiple farms, and you do not need detailed information about female history, then Datamart is the only mode necessary. It is fast and consumes few resources.

See also:

Uploading the Web server data from the desktop application

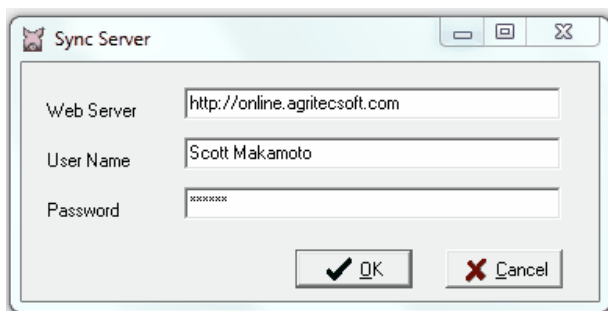
Update Web DataMart

Export detailed databases to Web

20.5 Update Web DataMart

First you need to create an account in the Agritech Online web. Please contact us.

For updating the DataMart, open the desktop application, click File in main menu, then Update Web DataMart.



Enter the login data and click Ok. In the next form, select the farms that you want to extract the summary from. Usually you need to use "From Last 6 Months", or at least a gestation length, in the date selector. The reason is because some events that occur in recent time periods are affected by events that occurred some months ago. For example, a farrowing is the result of a service event which occurred some time ago.

When you click Ok, the application will begin to analyze each database to extract a summary and upload it to the Web server. It can take several minutes to hours, depending on the database size and your computer.

20.6 Export detailed databases to Web

The update is done in two steps: exporting databases to a file and then uploading it. In this way, a farm without an internet connection can be included.

For updating complete databases, click File in main menu, then Export Detailed Databases to Web Server.

Select the databases that you want to upload. You can upload multiple databases at one time.

Then enter the file path of the generated file in the "Output File" box. This path must be accessible from the server computer in remote connections. You can use mapped units.

If you are using a remote server, additionally you need to specify the real path for the server in "Destination Directory (Server Path)". You can leave it in blank if you are not using a remote server.

For example:

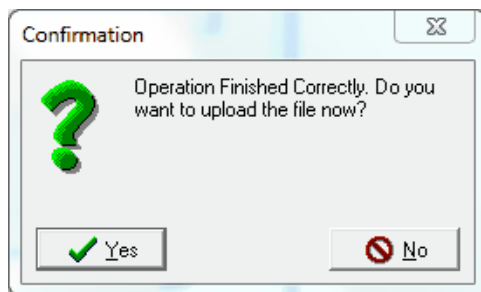
Output File: U:\MyTempFolder\MyFile.zip

Destination Directory (Server Path): C:\Agritec\MyTempFolder

Output File uses a mapped unit (U:) that points to C:\Agritec in the server. In other words, U:\MyTempFolder folder from the client computer is the same folder as C:\Agritec\MyTempFolder in the server computer.

Click Ok to start the process.

After the file has been generated, you can upload the file immediately or you can copy it to a memory stick for upload at a later time.



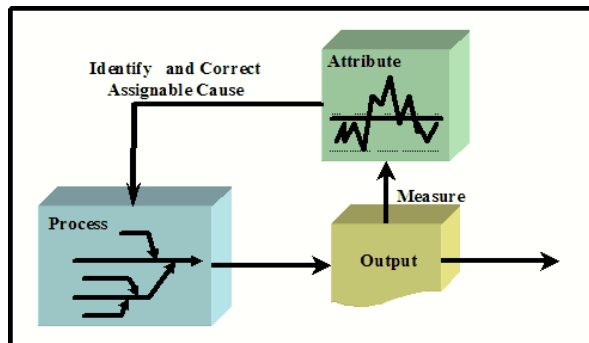
If you click Yes, the web browser is opened. Enter your login and password for the Agritec Online system and click Login button. In the next form, select the generated file and click Upload link. Your databases will be uploaded to the Web server.

If you lose the connection, you can go to the upload Web page directly and start the uploading again. It is not necessary to begin the export process in the application.

After the upload has finished, your database is in a pipeline, ready to automatically update your online database and to feed your online reports with the new data. This update process can take some hours, depending on the load to the server.

20.7 Introduction to Statistical Process Control or SPC

Statistical Process Control (SPC) can be applied to herd management processes. A process has one or more outputs, as depicted in the figure below. These outputs, in turn, have measurable attributes. SPC is based on the idea that these attributes have two sources of variation: natural (also known as common) and assignable (also known as special) causes. If the observed variability of the attributes of a process is within the range of variability from natural causes, the process is said to be under statistical control. The practitioner of SPC tracks the variability of the process to be controlled. When that variability exceeds the range to be expected from natural causes, one then identifies and corrects assignable causes.

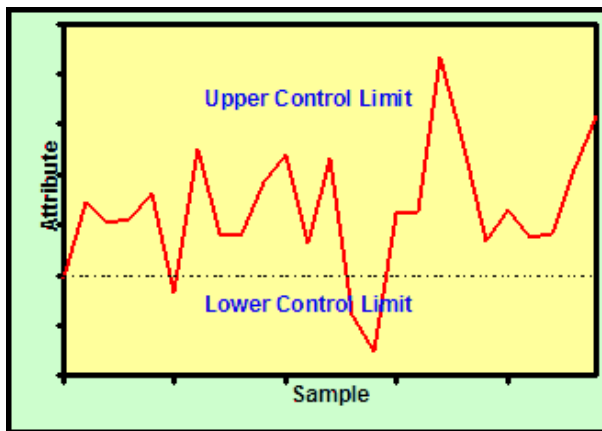


SPC is a powerful tool to optimize the amount of information needed for use in making management decisions. SPC provides real time analysis to establish controllable process baselines; learn, set, and dynamically improve process capabilities. SPC moves away from opinion-based decision making. These benefits of SPC cannot be obtained immediately by all organizations. SPC requires defined processes and a discipline of following them. It requires a climate in which personnel are not punished when problems are detected, and strong management commitment.

Control charts are a central technology for SPC. A control chart is a plot of measurements of a variable. The top and bottom borders are also known as the upper control limit or **UCL** and the lower control limit or **LCL**, which are represented by plus and minus three **standard deviations** from the mean.

The purpose of any control chart is to help determine if variations in measurements of a variable are caused by small, normal variations that cannot be acted upon, or by some larger special cause that can be acted upon or fixed. The type of chart to be used is based on the nature of the data.

The next figure shows a sample control chart constructed from simulated data. This is an X-chart, where the value of the attribute is graphed. Control limits are graphed. The control limits are based on a priori knowledge of the distribution of the attribute when the process is under control. The control limits are at three sigma. For a normal distribution, 0.2% of samples would fall outside the limits by chance. This control chart indicates the process is out of control. If this control chart were for real data, the next step would be to investigate the process to identify assignable causes and to correct them, thereby bringing the process under control.

**X-Chart**

There are four major types of control charts. The first type, the x-chart (and related xbar, r, and s-charts) is a generic and simple control chart. Porcitech uses the x-chart. In addition to the x-chart there are three specialized types of control charts, the p-chart, c-chart, and u-chart. These charts are used when the data being measured meet certain conditions (or attributes).

Standard Deviation

The standard deviation is the most commonly used measure of statistical dispersion. Simply put, it measures how spread out the values in a data set are. The importance of the standard deviation arises from Chebyshev's theorem, which asserts that in any data set, nearly all of the values will be close to the mean value, where the meaning of "close to" is specified by the standard deviation.

The standard deviation is defined as the square root of the variance. This means it is the root mean square (RMS) deviation from the average.

$$\sqrt{\frac{\sum (x - \bar{x})^2}{(n-1)}}$$

Top Level Intro

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top-level chapter starts

Part



21 Problems and error messages

21.1 Limit females exceeded

This error message can appear in multi-farm analysis report. It means that the number of breeding females managed by the report exceeds that allowed by the license. For example, if your license is for 1000 females and you try to analyze a consolidated report for 2 farms of 1000 females each, the total females managed by the report is 2000 and raises the error message.

You only can analyze multiple farms if the total females for all farms does not reach the limit of your license. If you are managing several farms, each farm with its own license on a separate computer, and you want to get consolidated reports of all farms, you cannot use a farm license. You will need to purchase the Consultant edition.

This error message can also appear if you have decreased the number of females in your license and try to analyze past periods with greater inventory.

See also:

Installing Consultant edition in the same computer

21.2 ISC ERROR CODE: 335544352

Firebird, the database engine, cannot find the farm database file.

1. Check database path in File | Open Farm.
2. Check that the database file exists and is not corrupted.
3. Using Windows Explorer, check that the Read Only property of the database file is Off.

21.3 ISC ERROR CODE: 335544375 Unavailable database

Firebird, the database engine, is not found. There are usually 4 reasons:

1. Firebird is not installed.

Make sure that it is installed. See [Firebird Installation](#)

2. Firebird is not running.

Firebird needs to run as a service or program in the computer. Go to **Control Panel | Firebird** and check that it is running. See [Firebird Installation](#)

3. The computer needs to be rebooted.

You may need to restart your computer after installing Firebird.

4. Fbclient.dll files does not exist or its version is incorrect

Install Porcitech again.

21.4 ISC ERROR CODE: 335544344 I/O error for file

Check the path of the database in the connection. Do not use mapped paths for remote connections, you must use the real path. Check the hard disk.

If this error appears when a client is trying to open the database and another is already connected, probably you have installed Porcitech in single user mode. Reinstall it selecting network mode.

21.5 ISC ERROR CODE: 335544721 Unable to complete network request

These problems are often caused by firewalls. Try disabling all firewalls and use the Windows XP SP2 network config program. Now if Porcitech works correctly, it means the problem was the firewall. You must enable them again to protect your system. Finally, you must open the Firebird port in your firewalls. If you are using the Firewall included in Windows, go to **Control Panel | Firewall**. Click **Exceptions** and click **Add Port**. Enter **3050** as port (Firebird default).

See Remote Connection in Open Farm for more information.

21.6 ISC ERROR CODE: 335544831 Access to UDF library AgrFireUDF.dll is denied by server administrator

You will get this error when Firebird cannot register or use a function in the UDF library. Possible reasons:

1. The system has not been restarted after the Firebird installation

2. The UDF library file does not exists

Check 'UDF' subdirectory of your Firebird installation. Perhaps you installed a new version of Firebird and did not copy the needed UDF files as the installer deleted the old ones.

3. The UDF library files are there, but not readable

Perhaps the user account under which the Firebird is running doesn't have privileges to read the UDF (.dll or .so) files. Firebird should also have privileges the read the UDF directory (both read and execute on Linux), but that is rarely a problem.

4. The access is restricted in firebird.conf

Please check your firebird.conf file for UdfAccess parameter. If you have multiple installations, also check that your server is loading the correct firebird.conf file.

21.7 Error 1722 The RPC server is unavailable

These problems are often caused by firewalls. Try disabling temporally all firewalls and use the Windows XP SP2 network config program. Also Usually occurs when DNS servers are not configured properly. See <http://support.microsoft.com/kb/323790>

21.8 Cannot attach to services manager

You can create a backup file to a network/mapped drive, and you can also open a backup file (for restore) from a net/ mapped drive, but the database you are trying to attach to has to (to backup or restore) must be on the very same machine where Firebird process is running on. The path used on your connection string must be the complete physical path on this machine (not a mapped drive)

Also, you can try to remove the gds32.dll file in the Windows system32 directory and reinstall Firebird.

21.9 Illegal System DLL relocation, System DLL User32.dll was relocated in memory

Agritec applications may not start after you install security update 925902 (MS07-017) and security update 928843 (MS07-008) on a computer that is running Microsoft Windows XP with Service Pack 2 (SP2).

Install update 935448 from the Microsoft Download Center to solve it:

<http://support.microsoft.com/?kbid=935448>

21.10 Virus or Trojan horse program is detected in Porcitech

Some antivirus like Trend Micro can detect false positives, reporting virus or Trojan horse warnings. Porcitech uses a protection system to obfuscate its code. In this way we protect our software against hackers and piracy, but at the same time some antivirus programs cannot analyze the Porcitech files. The antivirus program may report a false positive or place the files in quarantine.

If your antivirus cannot analyze Porcitech and reports a possible virus, the solution is to put Porcitech as "Trusted Programs" in your antivirus program.

NOD32 and Kaspersky, among other antivirys, do not detect a false positive in Porcitech

21.11 Directory is controlled by other .NET file

This problem can arise using Paradox or DBase tables in the importer. This is usually caused by one of two things:

1) A table is already open on another machine for which Porcitech is not configured to use the same .net file.

Solution: all machines using this database must be configured to use the same shared .net file. See 'Options | Local Area Network'

2) There are leftover .lck (lock) files in the database indicating that it was previously opened with a different .net file and didn't clean up after itself when it closed.

Solution: delete the .lck files.

Top Level Intro

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top-level chapter starts

Part

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22 Production and financial standards terminology

22.1 Production & financial standards

Annotated Dictionary of Production and Financial Standards Terminology is designed to provide information in regard to the subject matter covered. This chapter is distributed under the copyright of National Pork Boar (NPB), the author and owner.

The dictionary has been included in its totality to conserve the original integrity. Some of terms can not be used in Porcitech.



Production & Financial Standards © Copyright NPB 1999

22.2 Annotated Dictionary - Breeding Production Stage

ABORTION

The delivery of fetuses or fetal membranes between date of service and up to and including the 109th day of pregnancy.

ADJUSTED 21-DAY LITTER WEIGHT

An estimate of the average weight of a standardized litter of 10 pigs at 21 days of age.

Comment 1: Although there are published adjustment factors for pigs weighed in the range of 14-28 days of age, the adjusted weaning weight is most reliable for litters weighed at 21 ± 3 days.

Comment 2: This does not provide any meaningful economic assessment unless used for within-herd as opposed to across-herd comparisons.

Reference: National Swine Improvement Federation (NSIF)

Adjustment factors for age (days) at weighing														
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1.30	1.25	1.20	1.15	1.11	1.07	1.03	1.00	0.97	0.94	0.91	0.88	0.86	0.84	0.82

Adjustment factors for number of pigs nursed (after fostering)									
1	2	3	4	5	6	7	8	9	10+
65	65	65	50	37	26	17	10	4	0

See also: litter-weaning weight

ADJUSTED FARROWING RATE

The proportion of breeding females that farrow to a given number of services, excluding those that did not have an opportunity to farrow.

Comment 1: The only way to accurately estimate this statistic is to follow the outcome of each service for up to 125 days to determine whether the result was a repeat service, cull, death, abortion, farrowing, or failure to farrow.

Comment 2: Exclusions include breeding females that died or were removed for non-reproductive reasons.

See also: farrowing rate, abortion, cull, breeding female, failure to farrow, farrowing, repeat service, service

ANESTRUS FEMALE

A breeding female that is assumed not pregnant and is expected to express estrus, but has not been detected in estrus.

See also: breeding female, estrus

ARRIVAL TO ENTRY INTERVAL

Days between date of arrival on the farm and date of entry into the breeding herd for a prospective breeding female.

Comment 1: Day of entry is counted as day 0.

Comment 2: Arrival dates and entry dates for animals placed directly into the breeding herd may be the same, in which case the arrival to entry interval is zero.

Technical note: Because underlying distribution is not normal, average arrival to entry interval is not a good estimator of central tendency.

See also: arrival date, breeding female, entry date, and prospective breeding female

ARTIFICIAL INSEMINATION

The act of placing semen in the reproductive tract of a breeding female by means other than natural service.

See also: breeding female, natural service

BIRTH LITTER

Total born pigs produced by one breeding female at one farrowing.

Comment 1: total born pigs = (live born pigs + stillborn pigs + mummies)

See also: breeding female, farrowing, live born pigs, mummies, stillborn pigs, total born pigs, wean litter

BIRTH WEIGHT

The weight of a pig taken within 24 hr of birth.

Comment 1: Pertains to individual pigs.

See also: litter birth weight, live weight, live weight gain

BOAR

A male pig used for any breeding purpose.

BOAR DAY

One live boar for one day.

Comment 1: Measured at the end of the day.

Comment 2: An animal's boar days accumulate beginning at its entry date into the breeding herd.

See also: entry date, breeding female day, pig day

BREEDING FEMALE

An unmated or mated female kept for breeding purposes.

See also: breeding female inventory, breeding production stage, mated breeding female, unmated breeding female

BREEDING FEMALE CULLING RATE

The rate at which breeding females have been culled from the breeding production stage expressed on an annualized basis.

See also: breeding production stage

BREEDING FEMALE DAY

One live breeding female for one day.

Comment 1: Measured at the end of the day

Comment 2: An animal's breeding female days accumulate beginning at its entry date into the breeding herd.

Comment 3: The entry date for a purchased breeding female is its date of delivery to the breeding herd.

Comment 4: The entry date for a raised breeding female is the date on which its status changes from "prospective breeding female" to "unmated breeding female."

See also: boar day, breeding female, breeding production stage, entry date, pig day, mated breeding female, prospective breeding female, unmated breeding female

BREEDING FEMALE ENTRY RATE

The rate at which breeding females have been added to the breeding production stage expressed on an annualized basis.

Comment: Replacements are mostly unmated breeding females which are assigned Parity = 0 in the record system.

See also: breeding female, breeding female inventory, breeding female removal rate, breeding production stage

BREEDING FEMALE INVENTORY

Sum of mated female inventory and unmated female inventory

Comment 1: A breeding female is considered part of the breeding female inventory, effective of its entry date. i.e. the date on which a prospective breeding female becomes an unmated breeding female.

Comment 2: A breeding female contributes one breeding female day for each day that it is in the breeding herd. i.e. from entry to removal.

Comment 3: Where no enter event is recorded in an animal's record, breeding female days are counted from its first recorded event.

Productivity measures: **AVERAGE BREEDING FEMALE INVENTORY**

See also: breeding female day, breeding production stage, entry date, mated female inventory, unmated female inventory

BREEDING FEMALE MORTALITY RATE

The rate at which breeding females have died in the breeding production stage, expressed on an annualized basis.

See also: breeding production stage

BREEDING FEMALE REMOVAL RATE

The rate at which breeding females are removed from the breeding production stage, expressed on an annualized basis.

Comment 1: Removals include sales, deaths, and transfers out of the breeding herd.

Comment 2: Removal rate = (culling rate + mortality rate)

See also: breeding female, breeding female inventory, breeding production stage, culling rate, mortality rate, replacement rate

BREEDING FEMALE TO BOAR RATIO

Average breeding female inventory divided by average boar inventory.

Comment 1: Historically useful measure of adequacy of boar power.

Comment 2: Meaningful only where natural service is practiced exclusively.

Comment 3: Ratio increases significantly where artificial insemination is practiced.

Formula:
$$\frac{\text{average breeding female inventory}}{\text{average boar inventory}}$$

Calculation:
$$\frac{658.6}{32.4} = 20.3$$

See also: artificial insemination, average breeding female inventory, average boar inventory, breeding production stage, natural service

BREEDING FINISHER PIG

A pig in the finisher production stage intended for sale or transfer for breeding purposes.

Comment 1: Pertains to male and female pigs intended for breeding purposes.

Comment 2: Female pigs being raised for future introduction into the breeding unit should be classified as prospective breeding females.

See also: breeding nursery pig, breeding pig sales, breeding production stage, breeding weaned pig, finisher production stage, prospective breeding female

BREEDING HERD

The total inventory of breeding females and boars in the breeding production stage of a herd.

Comment 1: Does not include prospective breeding females.

See also: boar, breeding female inventory, breeding production stage, mated breeding female, unmated breeding female

BREEDING PIG

A pre-weaned pig, weaned pig, nursery pig, or finisher pig intended for sale or transfer for breeding purposes.

Comment 1: Pertains to male and female pigs intended for breeding purposes.

Comment 2: Female pigs being raised for future introduction into the breeding unit should be classified as prospective breeding females.

See also: breeding finisher pig, breeding pig sales, breeding nursery pig, breeding weaned pig, finisher pig nursery pig, pre-weaned pig, weaned pig,

BREEDING PRODUCTION STAGE

Production stage in which breeding females and boars are kept and managed for the purpose of producing weaned pigs.

Comment 1: The output of the breeding production stage is the weaned pig.

Comment 2: Weaned pigs leaving the breeding production stage may enter the nursery production stage and subsequently be moved to the finisher production stage. Alternatively, weaned pigs may be placed directly into the finisher production stage (Wean to finisher system.)

See also: finisher production stage, nursery production stage, weaned pig, weaned pigs / breeding female / year, weaned pigs / mated breeding female / year

COHORT

A group of animals which share one or more events in common within a defined time period.

Example 1: All finisher pigs marketed during the month of December (1 event).

Example 2: All nursery pigs placed during the 12th week of the year (1 event).

Example 3: All breeding females that were farrowed then weaned during a reporting period (2 events).

Example 4: All breeding females that arrived at the farm, entered the breeding herd, and were mated during the first quarter of the year (3 events).

See also: contemporary group, finisher pig, nursery pig, breeding female

CONCEPTION

Conceiving or becoming pregnant.

Comment 1: Technically, the fertilization and implantation of one or more ova (eggs).

Comment 2: The terms “conception rate” and “pregnancy rate” are often used

interchangeably when referring to pigs.

See also: pregnancy rate

CONCEPTION RATE

SEE: PREGNANCY RATE

CONTEMPORARY GROUP

A group of pigs that are of the same sex and breed/line combination that have been raised in the same management group and given the same opportunity to perform.

Comment 1: A contemporary group is a specific example of a cohort.

Comment 2: Contemporary groups are kept in the same location and fed the same feed.

Comment 3: In some situations, a contemporary group may be of mixed sex but all pigs in the group should be of the same breed/line combination.

Comment 4: A contemporary group for performance traits would be the pigs from one farrowing group that are raised in the same management group.

Comment 5: For reproductive traits, a contemporary group is a group of females that farrowed in the same facility during a specific time period (preferably three weeks or less.)

Example: All sows that farrowed during the first two weeks of September on a farm having two separate farrowing environments may be considered to comprise a cohort. However, the same animals would be considered to comprise two distinct contemporary groups as they did not share a common environment.

See also: cohort

CROSS FOSTERING

The transfer of preweaned pigs among litters.

See also: birth litter, fostering off, fostering on

CULL

Any live pig removed from the herd due to substandard performance, behavior, conformation, age, or disease.

Comment 1: Culling represents a planned effort to control the overall herd performance.

See also: culling rate

CULLING RATE

The rate at which animals are culled from a herd.

Comment 1: Culling rates of breeding animals should be calculated on an annualized basis.

Comment 2: Culling rates of growing animals should be calculated on a cohort basis.

Productivity Measures: **BREEDING FEMALE CULLING RATE**
 NURSERY PIG CULLING RATE

See also: breeding female, cull, nursery pig

ENTRY DATE

The date on which a breeding female or boar enters the breeding herd.

Comment 1: The date on which a prospective breeding female became an unmated breeding female.

Comment 2: The date on which a prospective breeding female or unmated breeding female leaves isolation or acclimatization facilities and becomes part of the breeding herd.

Comment 3: May preceded by or coincide with arrival date.

See also: arrival date, arrival to entry interval, boar, breeding herd, unmated breeding female, prospective breeding female

ENTRY TO FIRST SERVICE INTERVAL

Days between date of entry and date of first service.

Comment 1: Day of entry is counted as day 0.

Productivity measure: **AVERAGE ENTRY TO FIRST SERVICE INTERVAL**

Technical note: Because underlying distribution is not Normal, average entry to first service interval is not a good estimator of central tendency.

See also: entry date, unmated breeding female, weaning to first service interval

ESTRUS

A period of sexual receptivity of a breeding female to the boar.

Comment 1: Does not necessarily imply mating or service.

Comment 2: Synonymous with heat period.

See also: boar, breeding female, mating, service

EVENT DATE

The date on which an event occurs.

Examples: Events include farrowings, weanings, matings.

See also: arrival date, entry date, farrowing date, service date

FAILURE TO FARROW

Occurs when a mated breeding female has not farrowed 125 days after presumed effective service.

Comment 1: The effective date of service is considered to be day 0.

See also: farrow, mated breeding female, service

FARROWING

Birth of a litter of one or more live, stillborn, or mummified pigs on or after the 110th day of pregnancy.

Comment 1: The corresponding service date is considered to be day 0.

See also: abortion, failure to farrow, farrowing date, litter, live born pigs, mummies, service date, stillborn pigs, weaning

FARROWING DATE

The date on which the first pig of a birth litter was born.

See also: event date, birth litter

FARROWING FREQUENCY

The period between the start of consecutive groups of farrowings expressed in days or weeks.

See also: farrowing index, farrowing rate

FARROWING INDEX

The number of farrowings per breeding female per year.

Comment 1: Synonymous with litters farrowed / mated female / year.

Productivity measure: **LITTERS FARROWED / BREEDING FEMALE / YEAR**

See also: farrowing, farrowing date, litter

FARROWING INTERVAL

Days between two consecutive farrowing dates for a mated breeding female.

See also: farrowing date, mated breeding female

FARROWING RATE

The proportion of breeding females that farrow from a cohort of females served.

Comment 1: The only way to accurately estimate this statistic is to follow the outcome of

each service for up to 125 days to determine whether the result was a repeat service, cull, death, abortion, farrowing, or failure to farrow.

See also: adjusted farrowing rate, abortion, cohort, cull, breeding female, failure to farrow, farrowing, repeat service, service

FOSTERING

The transfer of pre-weaned pigs from one litter to another.

See also: fostering off, fostering on, net fostered, preweaned pig

FOSTERING OFF

Removal of preweaned pigs from a birth litter.

Comment 1: Pigs that a fostered off must also be fostered on to another litter.

See also: birth litter, cross fostering, fostering on, preweaned pig

FOSTERING ON

Introduction of pre-weaned pigs to a litter.

Comment 1: Pigs that a fostered on must also have been fostered off their birth litters.

See also: birth litter, cross fostering, foster off, preweaned pig

GESTATION DAY

A day on which a breeding female is gestating.

Comment 1: Gestation days accumulate between conception and farrowing or termination of pregnancy (abortion) or removal of a pregnant breeding female.

Comment 2: When counting or accumulating gestation days, the day of conception is counted as day 0.

Comment 3: Gestation days that do result in a farrowing are considered as productive days.

Comment 4: Gestation days that do not result in a farrowing are not considered as nonproductive days.

See also: abortion, conception, farrowing, lactation day, mated breeding female day, nonproductive day, productive day, unmated breeding female day

GESTATION LENGTH

Period of pregnancy or time between the conception service and subsequent farrowing or abortion.

Comment 1: The day of service is considered to be day 0.

Productivity measure: **AVERAGE GESTATION LENGTH**

See also: abortion, conception, conception service, farrowing, service

GILT

A female pig kept for purposes other than breeding.

Comment 1: A female pig which is kept for the purpose of future entry into the breeding herd is a *prospective breeding female*.

Comment 2: A female that has entered the breeding herd but not yet mated is an *unmated breeding female*.

See also: barrow, intact pigs, prospective breeding female, unmated breeding female

GILT POOL

The inventory of unmated breeding female pigs that are eligible for mating.

Comment 1: A female which has entered the breeding herd but not yet mated is an *unmated breeding female*.

Comment 1: *Prospective breeding females* which are kept for the purpose of future entry into the breeding herd but are not yet eligible for mating are not considered part of the gilt pool.

See also: prospective breeding female, unmated breeding female, unmated breeding female inventory

HEAT PERIOD

A period of sexual receptivity of a breeding female to the boar.

Comment 1: Does not necessarily imply mating or service.

Comment 2: Synonymous with estrus.

See also: boar, breeding female, mating, service

LACTATION

The production of milk by a breeding female between farrowing and weaning.

See also: breeding female, farrowing, weaning

LACTATION DAY

A day on which a breeding female is lactating.

Comment 1: Lactation days accumulate between farrowing and weaning.

Comment 2: When counting or accumulating lactation days, the day of farrowing is counted as day 0.

Comment 3: Lactation days are considered as productive days.

See also: farrowing, lactation day, mated breeding female day, nonproductive day, productive day, unmated breeding female day

LACTATION LENGTH

Days between farrowing and weaning of a breeding female.

Comment 1: Day of farrowing is counted as day 0.

Comment 2: Applies to breeding females whereas weaning age applies to pigs.

Productivity measure: **AVERAGE LACTATION LENGTH**

See also: cohort, farrowing, lactation length, nurse-off, weaning, weaning age

LITTER

Group of pigs associated with a lactating breeding female.

Comment 1: Term is not sufficiently specific to be useful without qualification. Preferred terms are **BIRTH LITTER**, **WEAN LITTER**, **NURSE LITTER**.

Productivity measures:

TOTAL BORN PIGS / BIRTH LITTER

WEANED PIGS / BIRTH LITTER

WEANED PIGS / WEAN LITTER

LITTERS FARROWED / BREEDING FEMALE / YEAR

LITTERS FARROWED / MATED BREEDING FEMALE / YEAR

See also: birth litter, wean litter, nurse litter, farrowing, farrowing date, total born pigs, weaned pigs, weaning.

LITTER BIRTH WEIGHT

Total birth weights of all live born pigs in a litter.

Comment 1: Pigs should be weighed within 24 hr of birth.

Comment 2: Litter birth weights should be recorded prior to any cross-fostering.

Comment 3: Include pigs that were born live, but have died before weighing.

Productivity measure: **AVERAGE LITTER BIRTH WEIGHT**

See also: cross-fostering, birth weight, litter, live born pigs

LITTER WEANING WEIGHT

Total weight of all pigs weaned off a breeding female during one lactation.

Productivity measure: **AVERAGE LITTER WEANING WEIGHT**

See also: litter, weaning weight

LIVE BORN PIGS

Pigs that show evidence of life after birth,

Comment 1: Life is considered to be present after birth if any one of the following is observed: breathing, heartbeat, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Comment 2: Calculated as: live born pigs = total born pigs - (stillborn pigs + mummies)

Productivity measure:

LIVE BORN PIGS / BREEDING FEMALE / YEAR

LIVE BORN PIGS / BIRTH LITTER

LIVE BORN PIGS / MATED BREEDING FEMALE / YEAR

LIVE WEIGHT

The weight of live pigs of any age.

See also: birth weight, litter birth weight, litter weaning weight, live weight gain, weaning weight

MATED BREEDING FEMALE

Any breeding female which has been mated at least once and has not yet been removed from the breeding herd.

Comment 1: Breeding female inventory = mated female inventory + unmated female inventory.

Productivity measures:

LITTERS FARROWED / MATED BREEDING FEMALE / YEAR

LIVE BORN PIGS / MATED BREEDING FEMALE / YEAR

See also: breeding female, breeding female inventory, mated breeding female inventory, mating, unmated female, unmated breeding female inventory

MATED BREEDING FEMALE DAY

One live mated breeding female for one day.

Comment 1: Measured at the end of the day

See also: breeding female, boar day, gestation day, lactation day, pig day, unmated breeding female day

MATED BREEDING FEMALE INVENTORY

A count of mated breeding females at a point in time.

Comment 1: A breeding female is considered part of the mated breeding female inventory, effective of its first service date. i.e. the date on which an unmated breeding female becomes a mated breeding female.

Comment 2: A mated breeding female contributes one mated breeding female day for each day of its life in the breeding herd between first service and removal.

Comment 3: Where no service event is recorded in an animal's Parity 0 record, its date of first service may be estimated by counting 114 d back from its first farrowing date.

Productivity measure: **AVERAGE MATED BREEDING FEMALE INVENTORY**

See also: breeding female, breeding female inventory, mated breeding female, mated breeding female day, service date, unmated breeding female, unmated breeding female inventory

MATING

Insemination of a breeding female.

Comment 1: One or more matings in the same estrus period comprise a service.

See also: breeding female, estrus, service

MORTALITY RATE

Death losses per unit time.

Comment 1: Expressed as percentage of the population at risk during the report period.

Comment 2: Mortality rates of breeding animals should be calculated on an annualized basis.

Comment 3: Mortality rates of growing animals should be calculated on a cohort basis.

Productivity measure: **BREEDING FEMALE MORTALITY RATE
NURSERY MORTALITY RATE (TIME PERIOD)
NURSERY MORTALITY RATE (COHORT)**

See also: average breeding female inventory, breeding female mortality rate, cohort

MUMMIES

Pigs that are born degenerate (discolored, shriveled, or decomposed) that have died sometime during gestation.

Comment 1: Synonym: mummified pigs.

See also: total born pigs

NET FOSTERED

Difference between the counts of preweaned pigs fostered on and nursed on, less pigs fostered off and nursed off.

Comment 1: A net fostered value other than zero will distort the calculation of preweaning mortality rates.

See also: fostering off, fostering on, nurse off, nurse on, preweaning mortality

NONPRODUCTIVE DAY

Any day on which a breeding female is neither gestating nor lactating.

See also: breeding female, lactation, gestation length, productive day

NURSE FEMALE

A lactating female which, having had all or part of its own litter weaned, suckles pigs farrowed by other breeding females.

See also: nurse off, nurse on, preweaned pig, weaning

NURSE LITTER

Preweaned pigs suckling a nurse female.

See also: birth litter, nurse female, nurse off, nurse on, wean litter

NURSE OFF

Removal of pigs from a nurse litter.

See also: fostering off, fostering on, nurse female, nurse on, nurse litter

NURSE ON

Addition of preweaned pigs to a nurse litter.

See also: fostering off, fostering on, nurse female, nurse off, nurse litter

OPEN

A term commonly used to describe a non-pregnant breeding female.

See also: breeding female

PARITY

The number of times that a breeding female has farrowed.

Comment 1: Unmated females entering the breeding herd are assigned Parity 0.

PREGNANCY RATE

The proportion of breeding females that are confirmed or presumed pregnant from a

cohort of females served.

Comment 1: Breeding females removed from the herd before the result is known should be excluded from the denominator.

Comment 2: More useful when qualified by a time period, e.g. **40-DAY PREGNANCY RATE**.

See also: cohort, farrowing rate

PREWEANED PIG

A pig that is still nursing.

See also: barrow, finisher pig, gilt, intact pig, nursery pig, weaned pig

PREWEANING DEATH

A live born pig that died prior to being weaned.

See also: live born pigs, post-weaning death, weaning

PREWEANING DEATH

A pig that dies between live birth and weaning.

See also: cohort, net foster, nurse off, preweaning mortality rate, wean litter

PREWEANING MORTALITY RATE

Pigs that die between live birth and weaning expressed as a percentage of those at risk.

Comment 1: Preweaning mortality rate is calculated from a cohort of litters that are weaned or nursed off in the report period.

See also: cohort, net foster, nurse off, preweaning death, wean litter

PRODUCTIVE DAY

A day on which a breeding female is either gestating or lactating.

Comment 1: Gestation days which do not result in a farrowing are not considered productive days.

Comment 2: By definition, only mated breeding females contribute productive days.

See also: gestation day, lactation, farrowing, nonproductive day

PROSPECTIVE BREEDING FEMALE

A female pig which is kept for the purpose of future entry into the breeding herd.

Comment 1: Prospective breeding females may be weaned pigs, nursery pigs, or finisher pigs being raised under the same conditions as other growing pigs destined for meat production.

See also: breeding female, mated breeding female, unmated breeding female

REMOVAL DATE

The date on which a breeding female or boar was physically removed from the breeding herd.

See also: boar, breeding female, removed boar, removed breeding female.

REMOVED BOAR

A boar that is no longer consuming feed or resources of the breeding herd.

Comment 1: Removals include the death, sale, transfer, or gift of the animal.

See also: breeding herd, removed breeding female

REMOVED BREEDING FEMALE

A breeding female that is no longer consuming assets or resources of the breeding herd.

Comment 1: Removals include the death, sale, transfer, or gift of the animal.

See also: breeding herd, removed boar

REPEAT BREEDER

See: **RETURN TO SERVICE**

REPEAT SERVICE

The act of serving a repeat breeder.

See also: repeat breeder, repeat service rate (cohort), repeat service rate (time period), service

REPEAT SERVICE RATE (COHORT)

The proportion of a cohort of breeding females that are repeat breeders within a parity record.

Formula:
$$\frac{\text{Count of breeding females in cohort served for 2nd time in parity record}}{\text{Count of breeding females in cohort of breeding females defined as being served for the first time in parity record with a stated time period}} * 100\%$$

Calculation:
$$\frac{7}{120} * 100\% = 5.8\%$$

See also: repeat breeder, repeat service, repeat service rate (time period), service

REPEAT SERVICE RATE (TIME PERIOD)

The proportion of services that involve repeat breeders.

Formula: $\frac{\text{Count of breeding females served for 2nd+ time in parity record}}{\text{Count of services in period}} * 100\%$

Calculation: $\frac{11}{131} * 100\% = 8.4\%$

See also: repeat breeder, repeat service, repeat service rate (cohort), service

REPLACEMENT

To take or fill the place of.

REPLACEMENT RATE

See **BREEDING FEMALE ENTRY RATE**

RETURN TO SERVICE

A breeding female observed in heat and served again more than 5 days after having been served.

Comment 1: 'Normal' or 'regular' return to service are those occurring 18-24 or 39-45 days after the previous service.

Comment 2: 'Early' returns to service are those occurring 5-17 days after the previous service.

Comment 3: 'Irregular' returns to service are those occurring 25+ days after the previous service.

SERVICE

One or more matings within a single estrus period.

Comment 1: A single estrus period may continue for up to five days.

See also: estrus, mating

SERVICE DATE

Date of first mating during any one estrus period.

See also: estrus, mating

SERVICE PERIOD

A period of time during which one or more matings may take place.

Comment 1: Service period may last up to 5 days.

See also: mating, service

STILLBORN PIGS

Fully developed pigs determined to be dead at birth.

Comment 1: Often found behind the breeding female or entangled in the afterbirth. This implies that they were never able to move and were therefore dead at birth.

Comment 2: Includes pigs that are determined dead at assisted farrowings.

Comment 3: The soft covering over the ends of the toes should be present in stillborn pigs.

Comment 4: Post-mortem confirmation of stillbirths may be done by immersing lungs in water. If lungs float in water, the pig must have breathed and was therefore not stillborn.

See also: breeding female, farrowing, live born pigs, mummies, stillborn percentage, total born pigs

STILLBORN RATE

The proportion of total born pigs that are stillborn.

Formula:
$$\frac{\text{Sum of stillborn pigs in period or cohort}}{\text{Sum of total born pigs in period or cohort}} \times 100\%$$

Calculation:
$$\frac{56}{444} \times 100 = 12.6\%$$

See also: cohort, stillborn pig, total born pigs

TIME SLICE

Analysis of records over a period of time, typically subdivided into a number of periods of length. Records included in the analysis may or may not have events in common.

TOTAL BORN PIGS

All pigs born in a litter.

Comment 1: Includes live born pigs, stillborn pigs, and mummies.

Calculation: total born pigs = (live born pigs + stillborn pigs + mummies)

See also: birth litter, live born pigs, mummies, stillborn pigs

UNMATED BREEDING FEMALE

A female entered into the breeding herd but not yet mated.

Comment 1: In the case of home-reared replacements often characterized by the act of changing diet formulations to those used in the breeding herd.

Comment 2: Classified as Parity 0 in record systems.

Comment 3: Breeding female inventory = mated breeding female inventory + unmated breeding female inventory.

See also: breeding female, breeding female inventory, mated breeding female inventory, mating, mated breeding female, unmated breeding female inventory

UNMATED BREEDING FEMALE DAY

One live unmated breeding female for one day.

Comment 1: Measured at the end of the day

See also: breeding female, boar day, gestation day, lactation day, mated breeding female day, pig day

UNMATED BREEDING FEMALE INVENTORY

A count of unmated breeding females at a point in time.

Comment 1: Comprises a pool of replacement breeding females.

Comment 2: A purchased unmated breeding female is considered part of the unmated breeding female inventory, effective of its arrival date.

Comment 3: An unmated breeding female contributes one unmated breeding female day for each day of its life in the breeding herd between arrival and first service.

Comment 4: Prospective breeding females are **not** considered part of the unmated breeding female inventory.

Productivity measure: **AVERAGE UNMATED BREEDING FEMALE INVENTORY**

Formula:
$$\frac{\text{Total unmated breeding female days}}{\text{Number of days in period}}$$

Calculation:
$$\frac{21,937}{365} = 60.1$$

See also: arrival date, breeding female, breeding female inventory, mated breeding female, mated breeding female day, service date, mated breeding female, mated breeding female inventory, prospective breeding female

WEAN LITTER

Total number of pigs weaned from a breeding female during one lactation.

Productivity measure: **WEANED PIGS / WEAN LITTER**

Formula:
$$\frac{\text{Sum of weaned pigs in period or cohort}}{\text{Count of weanings in period or cohort}}$$

Calculation:
$$\frac{5824}{555} = 10.5$$

Comment 1: All weaning events (including those with zero pigs) should be included in the denominator.

Productivity measure: **AVERAGE WEANING WEIGHT / WEAN LITTER**

Formula:
$$\frac{\text{Sum of weights (lb.) of weaned pigs in period or cohort}}{\text{Count of litters weaned and weighed in period or cohort}}$$

Calculation:
$$\frac{71,318}{555} = 128.5$$

See also: birth litter, breeding female, lactation, weaned pig, weaning

WEANED PIG

the breeding herd.

A pig that has been weaned but not yet transferred to the nursery production stage.

Comment 1: Weaned pigs are considered the primary output of

Comment 2: While pigs moved directly from farrowing to nursery facilities are, of course, weaned, they should be classified as nursery pigs immediately upon placement.

Comment 3: The term “weaned pig” applies at the point of sale or transfer to another herd. Purchased weaned pigs should be classified as nursery pigs immediately upon placement in a nursery facility.

Productivity measure: **WEANED PIGS / BREEDING FEMALE / YEAR**

Formula:
$$\frac{\text{Sum of weaned pigs in period}}{\text{Average breeding female inventory}} \times \frac{365}{\text{days in period}}$$

Calculation:
$$\frac{485}{255.5} \times \frac{365}{28} = 24.8$$

WEANED PIG INVENTORY

A count of weaned pigs in a herd at a point in time.

Comment 1: Pigs purchased as “weaned pigs” become “nursery pigs” immediately upon placement into a nursery facility.

Comment 2: Pigs sold as “weaned pigs” are held as “preweaned pigs” until the time of sale.

Comment 3: Considering comments 1 and 2 above, the weaned pig inventory of any herd is typically zero.

See also: asset, balance sheet, finisher pig, finisher pig inventory, nursery pig inventory, weaned pig

WEANING

The act of separating suckling pigs from a breeding female.

See also: farrowing

WEANING AGE

Days between birth and weaning of a pig.

Comment 1: Day of birth is counted as day 0.

Comment 2: Applies to pigs whereas lactation length applies to breeding females.

Comment 3: It is assumed that pigs fostered onto a breeding female are the same age as the pigs born to it

Productivity measure: **AVERAGE WEANING AGE**

Formula:
$$\frac{\text{Sum of lactation lengths of mated breeding females that were weaned in period or cohort}}{\text{Count of weanings in period or cohort}}$$

Calculation:
$$\frac{3788}{256} = 14.8 \text{ d.}$$

See also: farrowing, lactation length, weaning

WEANING DATE

The date on which a suckling pig was separated from a breeding female.

See also: farrowing date, weaning

WEANING PERCENTAGE

The proportion of pigs that are eventually weaned from a cohort of live born pigs.

Comment 1: Should be calculated on a cohort basis.

Formula:
$$\frac{\text{Sum of pigs that are eventually weaned}}{\text{Sum of live born pigs in cohort}} \times 100\%$$

Calculation:
$$\frac{682}{791} \times 100 = 86.2\%$$

See also: cohort, weaned pig, weaning

WEANING TO FIRST SERVICE INTERVAL

Days between date of weaning and date of next service.

Comment 1: Day of weaning is counted as day 0.

Productivity measure: **AVERAGE WEANING TO FIRST SERVICE INTERVAL**

Formula:
$$\frac{\text{Sum of weaning and nurse off events to first service intervals in period or cohort}}{\text{Count of mated breeding females [weaned and served] or [nursed off and served] in cohort}}$$

Calculation:
$$\frac{806}{124} = 6.5 \text{ days.}$$

Technical note: Because underlying distribution is not normal, average weaning to first service interval is not a good estimator of central tendency.

See also: entry to first service interval

WEANING WEIGHT

The weight of a pig at weaning.

Productivity measure: **AVERAGE WEANING WEIGHT / PIG**

Formula:
$$\frac{\text{Sum of weights (lb.) of weaned pigs in period or cohort}}{\text{Sum of weaned pigs weighed in period or cohort}}$$

Calculation:
$$\frac{5985}{450} = 13.3 \text{ lbs.}$$

See also: birth weight, litter birth weight, live weight, live weight gain, litter weaning weight

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22.3 Annotated Dictionary - Growing Production Stage

AGE AT SALE

Days between birth and sale of a pig.

Comment 1: Day of birth is counted as day 0.

BASE MIX

A uniform mixture of macro-minerals, micro-minerals, vitamins and carrier blended together in one product (generally 40 lbs. or more) and added to energy and protein sources to make up a complete feed.

See also: complete feed, energy, premix, protein, minerals

BASE PRICE

Price received for pigs before net adjustments, discounts and sort adjustment.

See also: discount, net adjustments, sort adjustment

CALCULATION OF FEED CONVERSION

The ratio of feed disappearance to live weight gain, does not include the weight of pigs that die. However, it does include the feed they consumed. This recognizes that the output of the production stage is measured in terms of saleable product.

CARCASS

The eviscerated slaughtered pig after the removal of lungs, heart, liver, intestines, and ancillary organs or mesenteries, bladder, reproductive organs and blood.

Comment 1: There are national variations in the measurement of carcass weight.

Comment 2: Assume that the tongue and head remains attached, unless otherwise specified.

See also: discount, sort adjustment

CLOSEOUT

Removal of a cohort of pigs from a production stage.

Comment 1: Enables calculation and matching of feed disappearance, live weight gain, and

feed conversion efficiency.

See also: cohort, feed conversion efficiency, feed disappearance, live weight gain, nursery production stage, finisher production stage

COHORT

A group of animals which share one or more events in common within a defined time period.

Example 1: All finisher pigs marketed during the month of December (1 event).

Example 2: All nursery pigs placed during the 12th week of the year (1 event).

Example 3: All breeding females that were farrowed then weaned during a reporting period (2 events).

Example 4: All breeding females that arrived at the farm, entered the breeding herd, and were mated during the first quarter of the year (3 events).

See also: contemporary group, finisher pig, nursery pig, breeding female

COLD NURSERY (NURSERY)

Secondary part of nursery stage where the environment is not artificially heated.

COMPLETE FEED

A diet in which all feedstuffs are blended into a single mixture.

See also: base mix, premix

COST CENTER

Support activities important to and used by profit centers or other cost centers. I.e. an equipment cost center supports the crop profit center.

DAILY LIVEWEIGHT GAIN

The live weight gain of a pig divided by the number of days between two weighings.

Comment 1: The day of the first weighing is considered to be day 0.

Productivity measures:

NURSERY AVERAGE DAILY LIVE WEIGHT GAIN (CLOSE-OUT BASIS)
NURSERY AVERAGE DAILY LIVE WEIGHT GAIN (CONTINUOUS FLOW)

FINISHER AVERAGE DAILY LIVE WEIGHT GAIN (CLOSE-OUT BASIS)
FINISHER AVERAGE DAILY LIVE WEIGHT GAIN (CONTINUOUS FLOW)

See also: live weight, live weight gain

DISCOUNT

An adjustment to the base price paid for a pig carcass due to tissue damage, injuries, etc.

See also: carcass, sort adjustment

FEED CONVERSION RATIO (FCR)

Ratio of feed disappearance to live weight gain.

Comment 1: Feed disappearance is *apparent* intake rather than *actual* intake.

Comment 2: FCR has little meaning unless the composition of the feed, the type of pig, and the live weight range over which it was estimated are stated.

Comment 3: Synonymous with **FEED EFFICIENCY (FE)**

Productivity measures: **NURSERY FEED / LIVE WEIGHT GAIN**
FINISHER FEED / LIVE WEIGHT GAIN

See also: feed disappearance, live weight gain

FEED DELIVERY (COST OF GOODS)

Money paid for delivery of purchased complete feeds and feed ingredients.

See also: feed (cost of goods), feed related services (cost of goods)

FEED DISAPPEARANCE

The total amount of feed that is consumed and wasted.

Comment 1: Includes both intake and waste.

Comment 2: Applies either to individuals or groups of pigs.

Comment 3: Used interchangeably with **FEED INTAKE**.

Productivity measure: **AVERAGE DAILY FEED DISAPPEARANCE (ADFD)**

See also: feed intake, pig day

FEED EFFICIENCY (FE)

See **FEED CONVERSION RATIO (FCR)**

FEED INGREDIENT

Any component part of a pig diet.

See also: base mix, energy, feed supplement, minerals, premix, protein,

FEED INTAKE

See **FEED DISAPPEARANCE**

FEED SUPPLEMENT

Dietary component containing high concentrations of protein, vitamins, and minerals.

Comment 1: Combined with an energy source (e.g. corn, barley) to provide a complete feed.

See also: complete feed, energy, protein, minerals.

FINISHER

Anything past nursery, including grower and pre-finisher.

FINISHER FEED

Feed offered to pigs in the finisher production stage.

See also: breeding herd feed, complete feed, creep feed, nursery feed

FINISHER PIG

A growing pig beyond the nursery production stage.

See also: nursery pig, nursery production stage, weaned pig

FINISHER PIG INVENTORY

A count of finisher pigs in a herd at a point in time.

See also: asset, balance sheet, finisher pig, nursery pig, nursery pig inventory, weaned pig, weaned pig inventory

FINISHER PIG SALES INCOME

Income from sale of pigs sold or transferred out of the finisher production stage.

See also: finisher pig sales income, nursery pig sales income

FINISHER PRODUCTION STAGE

Production stage associated with finisher pigs.

See also: finisher pig, nursery production stage

GENETIC PREMIUM

The portion of income realized from the sale of pigs for breeding purposes over and above their value if sold as commercial pigs.

GROSS PROFIT

The difference between gross revenue and cost of goods sold for a business during an accounting period.

Comment 1: $\text{Gross Profit} = (\text{Gross Revenue} - \text{Cost of Goods Sold})$

See also: cost of goods sold, gross revenue

GROSS REVENUE

The total income of a business from all sources during an accounting period.

Comment 1: $(\text{Gross Revenue} - \text{Cost of Good Sold}) = \text{Gross Profit}$

See also: cost of goods sold, gross profit

GROWER (FINISHER)

An optional part at the beginning of the finishing stage, immediately following the nursery stage.

LIVE WEIGHT

The weight of live pigs of any age.

See also: birth weight, litter birth weight, litter weaning weight, live weight gain, weaning weight

LIVE WEIGHT GAIN

The increase in live weight of a pig between two weighings.

Productivity measure: **LIVE WEIGHT GAIN / NURSERY PIG**
 LIVE WEIGHT GAIN / FINISHER PIG

MARKET LIVESTOCK

Livestock that will not be used for breeding purposes.

MINERALS

Inorganic dietary elements necessary for essential body functions.

Comment 1: Macro minerals include calcium, phosphorus, and salt.

Comment 2: Micro minerals include copper, iodine, selenium, zinc, etc.

See also: base mix, complete feed, energy, feed supplement, premix, protein

MORTALITY RATE

Death losses per unit time.

Comment 1: Expressed as percentage of the population at risk during the report period.

Comment 2: Mortality rates of breeding animals should be calculated on an annualized basis.

Comment 3: Mortality rates of growing animals should be calculated on a cohort basis.

Productivity measure: **BREEDING FEMALE MORTALITY RATE**
NURSERY MORTALITY RATE (TIME PERIOD)
NURSERY MORTALITY RATE (COHORT)

NURSERY FEED

Feed offered to pigs in the nursery production stage.

See also: breeding herd feed, complete feed, creep feed, finisher feed, nursery production stage

NURSERY PIG

A pig that has been weaned and is currently in the nursery production stage.

Comment 1: Live weight of nursery pigs may be up to 70 lb.

Comment 2: Pigs weaned directly from farrowing accommodations into nursery facilities are classified as nursery pigs.

Comment 3: Pigs sold or transferred at weaning are classified as weaned pigs. Such pigs do not become nursery pigs until placement in a nursery facility.

See also: finisher pig, finisher pig sales, weaned pig, weaned pig sales

NURSERY PIG INVENTORY

A count of nursery pigs in a herd at a point in time.

Comment 1: Pigs purchased as “weaned pigs” become “nursery pigs” immediately upon placement into a nursery facility.

Productivity measure: **AVERAGE NURSERY PIG INVENTORY**

See also: asset, balance sheet, finisher pig, finisher pig inventory, nursery pig, weaned pig, weaned pig inventory

NURSERY PIG SALES INCOME

Pigs sold or transferred out of the nursery production stage.

See also: weaned pig sales income, finisher pig sales income

NURSERY PRODUCTION STAGE

Production stage associated with nursery pigs.

Comment 1: Nursery pigs have been weaned and may weigh up to 70 lb.

Comment 2: Pigs leaving the nursery production stage enter the finisher production stage.

See also: finisher production stage, nursery pig

PIG DAY

One live pig for one day.

Comment 1: Measured at the end of the day

Productivity measure: **ACCUMULATED PIG DAYS**

Calculation: The cumulative count of pig days for pigs in a specified location between two specific dates.

Productivity measure: **AVERAGE DAYS IN NURSERY
AVERAGE DAYS IN FINISHER**

See also: boar day, breeding female day

POST-WEANING DEATH

A pig that dies after weaning and prior to reaching market.

Comment 1: May be further specified as weaned-, nursery-, finisher- or transit- pig death

Comment 2: Expressed as percentage of the population at risk during the report period.

Productivity measure: **NURSERY MORTALITY RATE (COHORT)**
NURSERY MORTALITY RATE (TIME PERIOD)

See also: post-weaning mortality, preweaning death, preweaning mortality

POSTWEANING MORTALITY

Pigs that die between weaning and sale expressed as a percentage of those at risk.

Comment 1: May be further specified as weaned pig-, nursery-, finisher- or transit- death

Comment 2: Expressed as percentage of the population at risk during the report period.

Productivity measure: **POSTWEANING MORTALITY RATE**

See also: preweaning death

PRE-FINISHER (FINISHER)

The segment between the grower and finisher stage.

PRE-GROWER (FINISHER)

The optional first part of the finisher phase.

PREMISE

Coordinates coming up for global positioning.

PREMIUM

An extra payment above the base or nominal price.

PREMIX

A blended mixture of one or more micro-minerals and/or vitamins added to feed.

Comment 1: Typically added in quantities of 10 lb. / ton (5 kg / tonne) or less.

See also: base mix, complete feed, energy, minerals, protein

PRODUCTION BREAK-EVEN

Production cost for the profit center.

PRODUCTION STAGE

Because pigs are marketed at a variety of ages and weights, it would be unwise to attempt to define production stages by using age and weight ranges likely to change over time and by geographical locations. Each production stage should have some form of measurable output.

See also: all pork production systems are comprised of one or more of the following production stages, each of which produces measurable output: breeding, nursery, finisher.

PROFIT CENTER

Profit making activities within your business. I.e. pork, cattle, certain crops.

PURCHASED

An animal that was born outside the business entity and acquired in the exchange for a sum of money.

SORT ADJUSTMENT

Premium or discount associated with carcass weight.

See also: carcass, discount

STANDARD PIG

A pig sold within its target market weight range that is not substantially discounted from the base price.

Productivity measure: **LIVE WEIGHT SOLD / STANDARD FINISHER PIG**

Formula:
$$\frac{\text{Sum of live weights of standard finisher pigs sold in period or cohort}}{\text{Sum of head of standard finisher pigs sold in period or cohort}}$$

Productivity measure: **STANDARD FINISHER PIG SALES RATE**

Formula:
$$\frac{\text{Sum of finisher pigs sold as standard pigs in period or cohort}}{\text{Sum of head of all finisher pigs sold in period or cohort}}$$

See also: base price, substandard pig, target market weight range

SUBSTANDARD PIG

A pig sold outside of its target market weight range and/or substantially discounted from the price received for other pigs in its contemporary group.

Productivity measure: **LIVE WEIGHT SOLD / SUBSTANDARD FINISHER PIG**

Formula:
$$\frac{\text{Sum of live weights of substandard finisher pigs sold in period or cohort}}{\text{Sum of head of substandard finisher pigs sold in period or cohort}}$$

See also: contemporary group, discount, standard pig, target market weight range

SUPPLEMENT

A feed or feed mixture used to improve the nutritional value of basal feeds. Supplements are usually rich in protein, minerals, vitamins, antibiotics, or a combination of all or part of these; and they are usually combined with basal feeds to produce a complete feed.

TARGET MARKET WEIGHT RANGE

An ideal or intended weight range within which a particular class of pigs is intended to be marketed.

See also: standard pig, substandard pig

TIME SLICE

Analysis of records over a period of time, typically subdivided into a number of periods of length. Records included in the analysis may or may not have events in common.

TURNS PER YEAR

The theoretical rate of throughput of a nursery or finisher facility.

Comment 1: Pertains to all-in/all-out production systems.

Comment 2: May be calculated at the site, barn, room, or pen levels.

Comment 3: Based on the average number of days that each group occupies the facility plus the down time between groups required for cleaning.

Formula:
$$\text{Turns / yr.} = 365 / (\text{Days in facility} + \text{Cleaning Days})$$

Calculation:	Finisher turns / yr.	=	365 / (48.0 + 3.0)	=	7.16
	Nursery turns / yr.	=	365 / (130.0 + 4.0)	=	2.72

See also: finisher production stage, nursery production stage

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22.4 Breeding Production Stage

ADJUSTED FARROWING RATE

The proportion of breeding females which farrow to a given number of services, excluding those that did not have an opportunity to farrow.

Formula:
$$\frac{\text{Count of farrowings in (report) period or cohort}}{(\text{Count of mated breeding females served to farrow in (report) period or cohort}) - (\text{Count of breeding females removed for non-reproductive reasons})} * 100\%$$

AVERAGE ARRIVAL TO ENTRY INTERVAL

The average number of days between date of arrival on the farm and date of entry into the breeding herd for prospective breeding females, calculated on periodic or cohort basis.

Formula:
$$\frac{\text{Sum of arrival to entry intervals in period or cohort}}{\text{Count of breeding females arriving AND entering in period or cohort}}$$

AVERAGE BREEDING FEMALE INVENTORY

Formula:
$$\frac{\text{Sum of breeding female days in period}}{\text{Days in period}}$$

AVERAGE ENTRY TO FIRST SERVICE INTERVAL

Days between date of entry and date of first service for unmated breeding females, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of entry to first service intervals in period or cohort}}{\text{Count of breeding females entering AND served in period or cohort}}$$

AVERAGE GESTATION LENGTH

Period of pregnancy or time between the conception service and subsequent farrowing, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of all gestation lengths in period or cohort where gestations ended with farrow event}}{\text{Count of farrowings in period or cohort}}$$

AVERAGE LACTATION LENGTH

Days between farrowing and final weaning of breeding females, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of lactation lengths of mated breeding females that were either weaned or nursed-off in period or cohort}}{\text{Count of mated breeding females that were either weaned or nursed off in period or cohort}}$$

AVERAGE BIRTH LITTER WEIGHT

The average of a group of litter birth weights, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of birth litter weights (lb) in period or cohort}}{\text{Count of birth litters weighed in period or cohort}}$$

AVERAGE MATED BREEDING FEMALE INVENTORY

Formula:
$$\frac{\text{Sum of mated breeding female days in period}}{\text{Days in period}}$$

AVERAGE NON-PRODUCTIVE DAYS / BREEDING FEMALE / YEAR

Formula:
$$\frac{\text{Sum of nonproductive breeding female days in period}}{\text{Average breeding female inventory}} \times \frac{365}{\text{days in period}}$$

AVERAGE PARITY OF BEGINNING BREEDING FEMALE INVENTORY

The average parity of the breeding female inventory on the first day of the report period.

Formula:
$$\frac{\text{Sum of parities of beginning breeding female inventory}}{\text{Beginning breeding female inventory}}$$

AVERAGE PARITY OF ENDING BREEDING FEMALE INVENTORY

The average parity of the breeding female inventory on the last day of the report period.

Formula:
$$\frac{\text{Sum of parities of ending breeding female inventory}}{\text{Ending breeding female inventory}}$$

AVERAGE PRODUCTIVE DAYS / BREEDING FEMALE / YEAR

Formula:
$$\frac{\text{Sum of productive breeding female days in period}}{\text{Average breeding female inventory}} \times \frac{365}{\text{days in period}}$$

AVERAGE SALE PRICE / CWT. WEANED PIG SOLD

Formula:
$$\frac{\text{Gross revenue (pork, weaned pigs)}}{\text{Sum of live weights of weaned pigs sold in period (lb)}} \times 100$$

AVERAGE SALE PRICE / WEANED PIG SOLD

Formula:
$$\frac{\text{Gross revenue (pork, weaned pigs)}}{\text{Sum of numbers of weaned pigs sold in period}}$$

AVERAGE UNMATED BREEDING FEMALE INVENTORY

Formula:
$$\frac{\text{Sum of unmated breeding female days in period}}{\text{Days in period}}$$

AVERAGE WEANING AGE

Formula:
$$\frac{\text{Sum of wean litter ages in period or cohort}}{\text{Count of wean litters with weaning ages in period or cohort}}$$

AVERAGE WEANING TO FIRST SERVICE INTERVAL

The average number of days between weaning and next service for a group of mated breeding females, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of weaning and nurse off events to first service intervals in period or cohort}}{\text{Count of mated breeding females [weaned and served] or [nursed off and served] in cohort}}$$

AVERAGE WEANING WEIGHT / PIG

Formula:
$$\frac{\text{Sum of live weights of weaned pigs weighed (lb) in period or cohort}}{\text{Sum of numbers of weaned pigs weighed in period or cohort}}$$

AVERAGE WEANING WEIGHT / WEAN LITTER

Formula:
$$\frac{\text{Sum of live weights of weaned pigs weighed (lb) in period or cohort}}{\text{Count of wean litters weaned and weighed in period or cohort}}$$

BEGINNING FEMALE BREEDING INVENTORY

The number of mated and unmated breeding females on the first day of the report period.

BREEDING FEED (LB.) / LB. OF WEANED PIG

The weight of breeding herd feed and creep feed consumed in the production of one unit weight of weaned pig.

Formula:
$$\frac{(\text{Weight of breeding herd feed (lb.)} + \text{weight of creep feed disappeared in period or cohort})}{\text{Sum of live weights of weaned pigs (lb) in period or cohort}}$$

BREEDING FEED (LB.) / WEANED PIG

The weight of breeding herd feed and creep feed consumed in the production of one weaned pig.

Formula:
$$\frac{(\text{Weight of breeding herd feed (lb.)} + \text{weight of creep feed disappeared in period or cohort})}{\text{Sum of numbers of weaned pigs in period or cohort}}$$

BREEDING FEED EXPENSE (PORK) / BREEDING FEMALE / YR.

Formula:
$$\frac{\text{Breeding production stage feed expense (pork)} \times \frac{365}{\text{days in period}}}{\text{Average breeding female inventory}}$$

BREEDING FEED EXPENSE (PORK) / WEANED PIG PRODUCED

Formula: *Breeding production stage feed expense (pork)*

Sum of numbers of weaned pigs in period

% BREEDING FEED EXPENSE TO GROSS REVENUE (PORK, WEANED PIGS)

Formula:
$$\frac{\text{Breeding production stage feed expense (pork)}}{\text{Gross revenue (pork, weaned pigs)}} \times 100\%$$

% BREEDING FEED EXPENSE TO TOTAL FEED EXPENSE (PORK)

Formula:
$$\frac{\text{Breeding production stage feed expense (pork)}}{\text{Total feed expense (pork)}} \times 100\%$$

BREEDING FEMALE ENTRY RATE

The rate at which breeding females are added to the breeding herd, expressed on an annualized basis.

Comment: Replacements are mostly unmated breeding females which are assigned Parity = 0 in the record system.

Formula:
$$\frac{\text{Count of breeding females entered in period}}{\text{Average breeding female inventory in period}} \times \frac{365}{\text{days in period}} \times 100\%$$

BREEDING FEMALE CULLING RATE

The rate at which breeding females are culled from a herd, expressed on an annualized basis.

Formula:
$$\frac{\text{Count of breeding females culled in period}}{\text{Average breeding female inventory in period}} \times \frac{365}{\text{days in period}} \times 100\%$$

Average breeding female inventory in period days in period

BREEDING FEMALE MORTALITY RATE

The rate at which breeding females have died in herd, expressed on an annualized basis.

Formula:
$$\frac{\text{Count of breeding female deaths in period}}{\text{Average breeding female inventory in period}} \times \frac{365}{\text{days in period}} \times 100\%$$

BREEDING FEMALE REMOVAL RATE

The rate at which breeding females are removed from the herd, expressed on an annualized basis.

Formula:
$$\frac{\text{Count of breeding females removed in period}}{\text{Average breeding female inventory in period}} \times \frac{365}{\text{days in period}} \times 100\%$$

BREEDING LABOR EXPENSE (PORK) / WEANED PIG PRODUCED

Formula:
$$\frac{\text{Breeding production stage labor expense (pork)}}{\text{Sum of numbers of weaned pigs in period}}$$

% BREEDING LABOR EXPENSE TO GROSS REVENUE (PORK, WEANED PIGS)

Formula:
$$\frac{\text{Breeding production stage labor expense (pork)}}{\text{Gross revenue (pork, weaned pigs)}} \times 100\%$$

% BREEDING LABOR EXPENSE TO TOTAL LABOR EXPENSE (PORK)

Formula:
$$\frac{\text{Breeding production stage labor expense (pork)}}{\text{Total labor expense (pork)}} \times 100\%$$

BREEDING TOTAL EXPENSE (PORK) / WEANED PIG PRODUCED

Formula:
$$\frac{\text{Breeding production stage total expense (pork)}}{\text{Sum of numbers of weaned pigs in period}} \times 100\%$$

% BREEDING TOTAL EXPENSE TO GROSS REVENUE (PORK, WEANED PIGS)

Formula:
$$\frac{\text{Breeding production stage total expense (pork)}}{\text{Gross revenue (pork, weaned pigs)}} \times 100\%$$

% BREEDING TOTAL EXPENSE TO TOTAL PRODUCTION EXPENSE (PORK)

Formula:
$$\frac{\text{Breeding production stage total expense (pork)}}{\text{Total production expense (pork)}} \times 100\%$$

ENDING BREEDING FEMALE INVENTORY

The number of mated and unmated breeding females on the last day of the report period.

FARROWING RATE

The proportion of breeding females which farrow from a cohort of females served.

Formula:
$$\frac{\text{Count of farrowings in period or cohort}}{\text{Sum of breeding females served to farrow in period or cohort}} * 100\%$$

LITTERS FARROWED / BREEDING FEMALE / YEAR

The average number of farrowings per breeding female per year, calculated on an annualized basis.

Formula:
$$\frac{\text{Sum of gestation days in period}}{\text{Sum of breeding female days in period}} * \frac{365}{115}$$

LITTERS FARROWED / MATED BREEDING FEMALE / YEAR

The average number of farrowings per mated breeding female per year, calculated on an annualized basis.

Formula:
$$\frac{\text{Sum of gestation days in period}}{\text{Sum of mated breeding female days in period}} * \frac{365}{115}$$

LIVE BORN PIGS / BIRTH LITTER

Formula:
$$\frac{\text{Sum of numbers of live born pigs in period or cohort}}{\text{Count of farrowings in period or cohort}}$$

LIVE BORN PIGS / BREEDING FEMALE / YEAR

Formula:
$$\frac{\text{Sum of live born pigs in period}}{\text{Average breeding female inventory}} * \frac{365}{\text{days in period}}$$

LIVE BORN PIGS / MATED BREEDING FEMALE / YEAR

Formula:
$$\frac{\text{Sum of numbers of live born pigs in period}}{\text{Average mated breeding female inventory}} * \frac{365}{\text{days in period}}$$

LIVE WEIGHT SOLD / STANDARD WEANED PIG

The average live weight of a group of standard weaned pigs.

Formula:
$$\frac{\text{Sum of live weights of standard weaned pigs sold in period or cohort}}{\text{Sum of numbers of standard weaned pigs sold in period or cohort}}$$

LIVE WEIGHT SOLD / SUBSTANDARD WEANED PIG

The average live weight of a group of substandard weaned pigs.

Formula:
$$\frac{\text{Sum of live weights of substandard weaned pigs sold in period or cohort}}{\text{Sum of numbers of substandard weaned pigs sold in period or cohort}}$$

NET FOSTERED

Difference between the counts of preweaned pigs fostered on and nursed on, less pigs fostered off and nursed off.

Formula:
$$(\text{Sum of pigs fostered on} - \text{sum of pigs fostered off} + \text{sum of pigs nursed on} - \text{sum of pigs nursed off})$$

PREWEANING MORTALITY RATE (COHORT)

Pigs that die between live birth and weaning expressed as a percentage of those at risk.

Formula:
$$(\text{Sum of numbers of live born pigs})$$

from cohort of breeding females farrowed and weaned

- Sum of numbers of weaned pigs

from cohort of breeding females farrowed and weaned * 100%

(Sum of numbers of live born pigs

from cohort of breeding females farrowed and weaned)

PREWEANING MORTALITY RATE (TIME PERIOD)

Pigs that die between live birth and weaning expressed as a percentage of those at risk.

Formula: (Sum of numbers of live born pigs
+ net fostered
- sum of weaned pigs in period) * 100%
(Sum of numbers of live born pigs
+ net fostered in period)

REPEAT SERVICE RATE (COHORT)

The proportion of a cohort of breeding females that are repeat breeders within a parity record.

Formula: Count of breeding females in cohort served for 2nd time in parity record *
100%
Count of breeding females in cohort of breeding females defined as being
served for the first time in parity record within a stated time period

REPEAT SERVICE RATE (TIME PERIOD)

The proportion of services that involve repeat breeders.

Formula: Count of breeding females served for 2nd+ time in parity record * 100%
Count of services in period

STANDARD WEANED PIG SALES RATE

The proportion of weaned pig sales that are standard pigs.

Formula:
$$\frac{\text{Sum of numbers of weaned pigs sold as standard pigs in period or cohort}}{\text{Sum of numbers of (all) weaned pigs sold in period or cohort}} * 100\%$$

STILLBORN RATE

The proportion of total born pigs that are stillborn.

Formula:
$$\frac{\text{Sum of numbers of stillborn pigs in period or cohort}}{\text{Sum of numbers of total born pigs in period or cohort}} * 100\%$$

TOTAL BORN PIGS / BIRTH LITTER

The average total born litter size, calculated on a periodic or cohort basis.

Formula:
$$\frac{\text{Sum of numbers of total born pigs in period or cohort}}{\text{Count of farrowings in period or cohort}}$$

WEANED PIG (LB.) PRODUCED / BREEDING FEMALE / YEAR

Formula:
$$\frac{\text{Sum of live weights of pigs weaned and weighed in period}}{\text{Average breeding female inventory}} * \frac{365}{\text{days in period}}$$

WEANED PIG SALES (\$) / BREEDING FEMALE / YR.

Formula:
$$\frac{\text{Gross revenue (pork, weaned pigs)}}{\text{Average breeding female inventory}} * \frac{365}{\text{days in period}}$$

WEANED PIGS / BIRTH LITTER

The average number of weaned pigs produced per birth litter.

Formula:
$$\frac{\text{Sum of numbers of weaned pigs in period or cohort}}{\text{Count of farrowings in period or cohort}}$$

WEANED PIGS / BREEDING FEMALE / YEAR

The average number of weaned pigs produced per average breeding female, expressed on an annualized basis.

Formula:
$$\frac{\text{Sum of numbers of weaned pigs in period}}{\text{Average breeding female inventory}} \times \frac{365}{\text{days in period}}$$

WEANED PIGS / MATED BREEDING FEMALE / YEAR

The average number of weaned pigs produced per average mated breeding female, expressed on an annualized basis.

Formula:
$$\frac{\text{Sum of numbers of weaned pigs in period}}{\text{Average mated breeding female inventory}} \times \frac{365}{\text{days in period}}$$

WEANED PIGS / WEAN LITTER

Formula:
$$\frac{\text{Sum of numbers of weaned pigs in period or cohort}}{\text{Count of weanings in period or cohort}}$$

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22.5 Growing Production Stage

NURSERY PRODUCTION STAGE

AVERAGE DAILY NURSERY FEED DISAPPEARANCE (LB.) / PIG

Formula:
$$\frac{\text{Weight of nursery feed disappeared (lb) in period or cohort}}{\text{Sum of nursery pig days in period or cohort}}$$

AVERAGE DAYS IN NURSERY

Formula:
$$\frac{\text{Sum of nursery pig days in period or cohort}}{(\text{Sum of numbers of nursery pigs sold in period} + \text{sum of numbers of nursery pigs transferred out of nursery in period})}$$

AVERAGE NURSERY PIG INVENTORY

Formula:
$$\frac{\text{Sum of nursery pig days in period or cohort}}{\text{Days in period}}$$

AVERAGE SALE PRICE / CWT. NURSERY PIG SOLD

Formula:
$$\frac{\text{Gross revenue (pork, nursery pigs)}}{\text{Sum of live weights of standard nursery pigs sold in period (lb)} + \text{Sum of live weights of substandard nursery pigs sold in period (lb)}} \times 100$$

AVERAGE SALE PRICE / NURSERY PIG SOLD

Formula:
$$\text{Gross revenue (pork, nursery pigs)}$$

Sum of numbers of nursery pigs sold in period

LIVE WEIGHT GAIN (LB) / NURSERY PIG

Average total live weight of gain of a pig in the nursery production stage.

Formula: (Sum of live weights of nursery pigs at end of period (lb)
 - sum of live weights of nursery pigs at beginning of period (lb)
 + *sum of live weights of nursery pigs sold in period (lb)*
 + sum of live weights of nursery pigs transferred out of nursery in period (lb)
 - sum of live weights of nursery pigs transferred into nursery in period (lb)
 - *sum of live weights of standard nursery purchased (lb) in period*
 - *sum of live weights of substandard nursery purchased (lb) in period*
 (Sum of numbers of nursery pigs at beginning of period
 + sum of numbers of nursery pigs transferred into nursery in period
 + sum of numbers of nursery pigs purchased into nursery in period
 - Sum of numbers of nursery pigs at end of period)

LIVE WEIGHT SOLD (LB.) / STANDARD NURSERY PIG

The average live weight of a group of standard nursery pigs.

Formula:
$$\frac{\text{Sum of live weights of standard nursery pigs sold in period or cohort}}{\text{Sum of numbers of standard nursery pigs sold in period or cohort}}$$

LIVE WEIGHT SOLD / SUBSTANDARD NURSERY PIG

The average live weight of a group of substandard nursery pigs.

Formula:
$$\frac{\text{Sum of live weights of substandard nursery pigs sold in period or cohort}}{\text{Sum of numbers of substandard nursery pigs sold in period or cohort}}$$

NURSERY AVERAGE DAILY LIVE WEIGHT GAIN (CLOSE-OUT)

Formula:
$$\frac{\begin{aligned} &(\text{Sum of live weights of standard nursery pigs sold in period or cohort (lb)} \\ &+ \text{sum of live weights of substandard nursery pigs sold in period or cohort (lb)} \\ &+ \text{sum of live weights of pigs transferred out of nursery (lb)} \\ &- \text{sum of live weights of pigs purchased into nursery (lb)} \\ &- \text{sum of live weights of pigs transferred into nursery (lb)}) \\ &\text{Sum of pig days in period} \end{aligned}}$$

NURSERY AVERAGE DAILY LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula:
$$\frac{\begin{aligned} &\text{Sum of live weights of nursery pigs at end of period (lb)} \\ &- \text{sum of live weights of nursery pigs at beginning of period (lb)} \\ &+ \text{sum of live weights of standard pigs sold in period or cohort (lb)} \\ &+ \text{sum of live weights of substandard pigs sold in period or cohort (lb)} \\ &+ \text{sum of live weights of pigs transferred out of nursery (lb)} \\ &- \text{sum of live weights of pigs purchased into nursery (lb)} \\ &- \text{sum of live weights of pigs transferred into nursery (lb)} \end{aligned}}{\text{Sum of pig days in period}}$$

NURSERY FEED EXPENSE / CWT. OF LIVE WEIGHT GAIN (CLOSE-OUT)

Formula:
$$\frac{\begin{aligned} &\text{Nursery production stage feed expense (pork) in period} \\ &[\text{Sum of live weights of standard nursery pigs sold in period (lb)} \\ &+ \text{Sum of live weights of substandard nursery pigs sold in period (lb)} \\ &+ \text{Sum of live weights of nursery pigs transferred out of nursery in period (lb)} \\ &- \text{Sum of live weights of nursery pigs transferred into nursery in period (lb)} \\ &- \text{Sum of live weights of pigs purchased into nursery in period (lb)}] / 100 \end{aligned}}$$

NURSERY FEED EXPENSE / CWT. OF LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula:
$$\frac{\begin{aligned} &\text{Nursery production stage feed expense (pork) in period} \\ &\text{Sum of live weights of nursery pigs at end of period (lb)} \\ &- \text{Sum of live weights of nursery pigs at beginning of period (lb)} \end{aligned}}$$

- + *Sum of live weights of standard nursery pigs sold in period (lb)*
- + *Sum of live weights of substandard nursery pigs sold in period (lb)*
- + *Sum of live weights of nursery pigs transferred out of nursery in period (lb)*
- *Sum of live weights of nursery pigs transferred into nursery in period (lb)*
- *Sum of live weights of pigs purchased into nursery in period (lb)*

% NURSERY FEED EXPENSE TO TOTAL FEED EXPENSE (PORK)

Formula:
$$\frac{\text{Nursery production stage feed expense (pork)}}{\text{Total feed expense (pork)}}$$

NURSERY FEED / LIVE WEIGHT GAIN (CLOSE OUT)

Ratio of feed disappearance to live weight gain measured in the nursery production stage.

Formula:
$$\frac{\text{Weight of nursery feed disappeared (lb) in period or cohort}}{\text{Sum of live weights of standard nursery pigs sold in period (lb)}} + \text{Sum of live weights of substandard nursery pigs sold in period (lb)} + \text{Sum of live weights of nursery pigs transferred out of nursery in period (lb)} - \text{Sum of live weights of nursery pigs transferred into nursery in period (lb)} - \text{Sum of live weights of pigs purchased into nursery in period (lb)}$$

NURSERY FEED / LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Ratio of feed disappearance to live weight gain measured in the nursery production stage.

Formula:
$$\frac{\text{Weight of nursery feed disappeared (lb) in period or cohort}}{\text{Sum of live weights of nursery pigs at end of period (lb)}} - \text{Sum of live weights of nursery pigs at beginning of period (lb)}$$

- + *Sum of live weights of standard nursery pigs sold in period (lb)*
- + *Sum of live weights of substandard nursery pigs sold in period (lb)*
- + *Sum of live weights of nursery pigs transferred out of nursery in period (lb)*
- *Sum of live weights of nursery pigs transferred into nursery in period (lb)*
- *Sum of live weights of pigs purchased into nursery in period (lb)*

NURSERY LABOR EXPENSE / CWT. OF LIVE WEIGHT GAIN (CLOSE-OUT)

Formula: *Nursery production stage labor expense (pork) in period*
Sum of live weights of standard nursery pigs sold in period (lb)
+ *Sum of live weights of substandard nursery pigs sold in period (lb)*
+ *Sum of live weights of nursery pigs transferred out of nursery in period (lb)*
- *Sum of live weights of nursery pigs transferred into nursery in period (lb)*
- *Sum of live weights of pigs purchased into nursery in period (lb)*

NURSERY LABOR EXPENSE / CWT. OF LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula: *Nursery production stage labor expense (pork) in period*
Sum of live weights of nursery pigs at end of period (lb)
- *Sum of live weights of nursery pigs at beginning of period (lb)*
+ *Sum of live weights of standard nursery pigs sold in period (lb)*
+ *Sum of live weights of substandard nursery pigs sold in period (lb)*
+ *Sum of live weights of nursery pigs transferred out of nursery in period (lb)*
- *Sum of live weights of nursery pigs transferred into nursery in period (lb)*
- *Sum of live weights of pigs purchased into nursery in period (lb)*

% NURSERY LABOR EXPENSE TO GROSS REVENUE (PORK, NURSERY PIGS)

Formula:
$$\frac{\text{Nursery production stage labor expense (pork)}}{\text{Gross revenue (pork, nursery pigs)}}$$

% NURSERY LABOR EXPENSE TO TOTAL LABOR EXPENSE (PORK)

Formula:
$$\frac{\text{Nursery production stage labor expense (pork)}}{\text{Total labor expense (pork)}}$$

NURSERY MORTALITY RATE (COHORT)

Formula:
$$\frac{\text{Sum of numbers of nursery pig deaths in period}}{\text{Sum of numbers of nursery pigs in cohort}} \times 100\%$$

NURSERY MORTALITY RATE (TIME PERIOD)

Formula:
$$\frac{\text{Sum of numbers of nursery pig deaths in period}}{\text{Sum of numbers of nursery pigs at beginning of period} + \text{Sum of numbers of nursery pigs transferred into nursery in period} + \text{Sum of numbers of nursery pigs purchased into nursery in period}} \times 100\%$$

NURSERY TOTAL EXPENSE / CWT. NURSERY LIVE WEIGHT GAIN (CLOSE OUT)

Formula:
$$\frac{\text{Nursery production stage total expense (pork)}}{[\text{Sum of live weights of standard nursery pigs sold in period (lb)} + \text{Sum of live weights of substandard nursery pigs sold in period (lb)} + \text{Sum of live weights of nursery pigs transferred out of nursery in period (lb)} - \text{Sum of live weights of nursery pigs transferred into nursery in period (lb)} - \text{Sum of live weights of pigs purchased into nursery in period (lb)}] / 100}$$

NURSERY TOTAL EXPENSE / CWT. NURSERY LIVE WEIGHT GAIN

(CONTINUOUS FLOW)

Formula:
$$\frac{\text{Nursery production stage total expense (pork)}}{[\text{Sum of live weights of nursery pigs at end of period (lb)} - \text{Sum of live weights of nursery pigs at beginning of period (lb)} + \text{Sum of live weights of standard nursery pigs sold in period (lb)} + \text{Sum of live weights of substandard nursery pigs sold in period (lb)} + \text{Sum of live weights of nursery pigs transferred out of nursery in period (lb)} - \text{Sum of live weights of nursery pigs transferred into nursery in period (lb)} - \text{Sum of live weights of pigs purchased into nursery in period (lb)}] / 100}$$

NURSERY TOTAL EXPENSE / LB. NURSERY LIVE WEIGHT GAIN (CLOSE OUT)

Formula:
$$\frac{\text{Nursery production stage total expense (pork)}}{\text{Sum of live weights of standard nursery pigs sold in period (lb)} + \text{Sum of live weights of substandard nursery pigs sold in period (lb)} + \text{Sum of live weights of nursery pigs transferred out of nursery in period (lb)} - \text{Sum of live weights of nursery pigs transferred into nursery in period (lb)} - \text{Sum of live weights of pigs purchased into nursery in period (lb)}}$$

% NURSERY TOTAL EXPENSE TO GROSS REVENUE (PORK, NURSERY PIGS)

Formula:
$$\frac{\text{Nursery production stage total expense (pork)}}{\text{Gross revenue (pork, nursery pigs)}}$$

STANDARD NURSERY PIG SALES RATE

The proportion of nursery pig sales that were standard pigs.

Formula:
$$\frac{\text{Sum of numbers of standard nursery pigs sold in period or cohort}}{\text{Sum of numbers of (all) nursery pigs sold in period or cohort}}$$

FINISHER PRODUCTION STAGE

AVERAGE CARCASS WEIGHT SOLD (LB.) / FINISHER PIG

Formula:
$$\frac{\text{Carcass weight sold (lb.) (finisher pigs) in period}}{\text{Sum of numbers of finisher pigs sold in period}}$$

AVERAGE DAILY FINISHER FEED DISAPPEARANCE (LB.) / PIG

Formula:
$$\frac{\text{Weight of finisher feed disappeared (lb) in period or cohort}}{\text{Sum of finisher pig days in period or cohort}}$$

AVERAGE DAYS IN FINISHER

Formula:
$$\frac{\text{Sum of finisher pig days in period}}{(\text{Sum of numbers of finisher pigs sold in period} + \text{sum of numbers of finisher pigs transferred out of finisher in period})}$$

AVERAGE FINISHER PIG INVENTORY

Formula:
$$\frac{\text{Sum of finisher pig days in period}}{\text{Days in period}}$$

AVERAGE LIVE WEIGHT SOLD (LB.) / FINISHER PIG

Formula:
$$\frac{\text{Sum of live weights of finisher pigs sold in period (lb)}}{\text{Sum of numbers of finisher pigs sold in period}}$$

AVERAGE SALE PRICE / CWT. FINISHER PIG SOLD

Formula:
$$\frac{\text{Gross revenue (pork, finisher pigs)}}{\text{Sum of live weights of finisher pigs sold in period (lb.)}} \times 100$$

AVERAGE SALE PRICE / FINISHER PIG SOLD

Formula:
$$\frac{\text{Gross revenue (pork, finisher pigs)}}{\text{Sum of numbers of finisher pigs sold in period}}$$

FINISHER AVERAGE DAILY LIVE WEIGHT GAIN (CLOSE-OUT BASIS)

Formula:
$$\frac{\begin{aligned} &\text{Sum of live weights of finisher pigs sold in period (lb)} \\ &+ \text{sum of live weights of finisher pigs transferred out in period (lb)} \\ &- \text{sum of live weights of finisher pigs purchased into finisher in period (lb)} \\ &- \text{sum of live weights of finisher pigs transferred into finisher in period (lb)} \end{aligned}}{\text{Sum of finisher pig days in period}}$$

FINISHER AVERAGE DAILY LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula:
$$\begin{aligned} &\text{Sum of live weights of finisher pigs at end of period (lb)} \\ &- \text{sum of live weights of finisher pigs at beginning of period (lb)} \\ &+ \text{sum of live weights of finisher pigs sold out of finisher in period (lb)} \\ &+ \text{sum of live weights of finisher pigs transferred out of finisher in period (lb)} \\ &- \text{sum of live weights of finisher pigs purchased into finisher in period (lb)} \\ &- \text{sum of live weights of finisher pigs transferred into finisher in period (lb)} \end{aligned}$$

Sum of pig days in period

FINISHER FEED EXPENSE / CWT. OF LIVE WEIGHT GAIN (CLOSE-OUT)

Formula:
$$\frac{\text{Finisher production stage feed expense (pork) in period}}{\text{Sum of live weights of finisher pigs sold in period (lb)}}$$

- + Sum of live weights of finisher pigs transferred out of finisher in period (lb)
- Sum of live weights of finisher pigs transferred into finisher in period (lb)
- Sum of live weights of pigs purchased into finisher in period (lb)

FINISHER FEED EXPENSE / CWT. OF LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula:
$$\frac{\text{Finisher production stage feed expense (pork) in period}}{100} *$$

- Sum of live weights of finisher pigs at end of period (lb)
- Sum of live weights of finisher pigs at beginning of period (lb)
- + Sum of live weights of finisher pigs sold in period (lb)
- + Sum of live weights of finisher pigs transferred out of finisher in period (lb)
- Sum of live weights of finisher pigs transferred into finisher in period (lb)
- Sum of live weights of pigs purchased into finisher in period (lb)

% FINISHER FEED EXPENSE TO GROSS REVENUE (PORK, FINISHER PIGS)

Formula:
$$\frac{\text{Finisher production stage feed expense (pork)}}{\text{Gross revenue (pork, finisher pigs)}}$$

% FINISHER FEED EXPENSE TO TOTAL FEED EXPENSE (PORK)

Formula:
$$\frac{\text{Finisher production stage feed expense (pork)}}{\text{Total feed expense (pork)}}$$

FINISHER FEED / LIVE WEIGHT GAIN (CLOSE OUT)

Ratio of feed disappearance to live weight gain measured in the finisher production stage.

Formula:
$$\frac{\text{Weight of finisher feed (lb) disappeared in period or cohort}}{\text{Sum of live weights of finisher pigs sold in period (lb)}} + \text{Sum of live weights of finisher pigs transferred out of finisher in period (lb)} - \text{Sum of live weights of finisher pigs transferred into finisher in period (lb)} - \text{Sum of live weights of pigs purchased into finisher in period (lb)}$$

FINISHER FEED / LIVE WEIGHT GAIN (CONTINUOUS FLOW)**Ratio of feed disappearance to live weight gain measured in the finisher production stage.**

Formula:
$$\frac{\text{Weight of finisher feed (lb) disappeared in period or cohort}}{\text{Sum of live weights of finisher pigs at end of period (lb)} - \text{Sum of live weights of finisher pigs at beginning of period (lb)} + \text{Sum of live weights of finisher pigs sold in period (lb)} + \text{Sum of live weights of finisher pigs transferred out of finisher in period (lb)} - \text{Sum of live weights of finisher pigs transferred into finisher in period (lb)} - \text{Sum of live weights of pigs purchased into finisher in period (lb)}}$$

FINISHER LABOR EXPENSE / CWT. OF LIVE WEIGHT GAIN (CLOSE-OUT)

Formula:
$$\frac{\text{Finisher production stage labor expense (pork) in period}}{\text{Sum of live weights of finisher pigs sold in period (lb)}} + \text{Sum of live weights of finisher pigs transferred out of finisher in period (lb)} - \text{Sum of live weights of finisher pigs transferred into finisher in period (lb)} - \text{Sum of live weights of pigs purchased into finisher in period (lb)}$$

FINISHER LABOR EXPENSE / CWT. OF LIVE WEIGHT GAIN (CONTINUOUS

FLOW)

Formula:
$$\frac{\text{Finisher production stage labor expense (pork) in period}}{\text{Sum of live weights of finisher pigs at end of period (lb)}} - \text{Sum of live weights of finisher pigs at beginning of period (lb)} + \text{Sum of live weights of finisher pigs sold in period (lb)} + \text{Sum of live weights of finisher pigs transferred out of finisher in period (lb)} - \text{Sum of live weights of finisher pigs transferred into finisher in period (lb)} - \text{Sum of live weights of pigs purchased into finisher in period (lb)}$$

% FINISHER LABOR EXPENSE TO GROSS REVENUE (PORK, FINISHER PIGS)

Formula:
$$\frac{\text{Finisher production stage labor expense (pork)}}{\text{Gross revenue (pork, finisher pigs)}}$$

% FINISHER LABOR EXPENSE TO TOTAL LABOR EXPENSE (PORK)

The proportion of total labor expense (pork) allocated to the finisher production stage.

Formula:
$$\frac{\text{Finisher production stage labor expense (pork)}}{\text{Total labor expense (pork)}}$$

FINISHER MORTALITY RATE (COHORT)

Formula:
$$\frac{\text{Sum of numbers of finisher pig deaths in period}}{\text{Sum of numbers of finisher pigs in cohort}} * 100\%$$

FINISHER MORTALITY RATE (TIME PERIOD)

Formula:
$$\frac{\text{Sum of numbers of finisher pig deaths in period}}{\text{Sum of numbers of finisher pigs at beginning of period} + \text{sum of numbers of finisher pigs transferred into finisher} + \text{sum of numbers of finisher pigs purchased into finisher}} * 100\%$$

FINISHER TOTAL EXPENSE / CWT. OF LIVE WEIGHT GAIN (CLOSE-OUT)

Formula:
$$\frac{\text{Finisher production stage total expense (pork) in period}}{\text{Sum of live weights of finisher pigs sold in period (lb)}} \times 100$$

+ Sum of live weights of finisher pigs transferred out of finisher in period (lb)

- Sum of live weights of finisher pigs transferred into finisher in period (lb)

- Sum of live weights of pigs purchased into finisher in period (lb)

FINISHER TOTAL EXPENSE / CWT. OF LIVE WEIGHT GAIN (CONTINUOUS FLOW)

Formula:
$$\frac{\text{Finisher production stage total expense (pork)}}{\text{Sum of live weights of finisher pigs at end of period (lb)}} \times 100$$

- Sum of live weights of finisher pigs at beginning of period (lb)

+ Sum of live weights of finisher pigs sold in period (lb)

+ Sum of live weights of finisher pigs transferred out of finisher in period (lb)

- Sum of live weights of finisher pigs transferred into finisher in period (lb)

- Sum of live weights of pigs purchased into finisher in period (lb)

% FINISHER TOTAL EXPENSE TO GROSS REVENUE (PORK, FINISHER PIGS)

Formula:
$$\frac{\text{Finisher production stage total expense (pork)}}{\text{Gross revenue (pork, finisher pigs)}} \times 100$$

LIVE WEIGHT GAIN / FINISHER PIG

Average total live weight of gain of a pig in the finisher production stage.

Formula:
$$\frac{\text{Sum of live weights of finisher pigs at end of period (lb)}}{\text{Sum of live weights of finisher pigs at beginning of period (lb)}} \times 100$$

+ Sum of live weights of finisher pigs sold in period (lb)

- + Sum of live weights of finisher pigs transferred out of finisher in period (lb)
- Sum of live weights of finisher pigs transferred into finisher in period (lb)
- Sum of live weights of finisher purchased into finisher in period (lb)
- (Sum of numbers of finisher pigs at beginning of period
- + Sum of numbers of finisher pigs transferred into finisher in period
- Sum of numbers of finisher pigs at end of period)

LIVE WEIGHT SOLD / STANDARD FINISHER PIG

The average live weight of a group of standard finisher pigs.

Formula:
$$\frac{\text{Sum of live weights of standard finisher pigs sold in period or cohort}}{\text{Sum of numbers of standard finisher pigs sold in period or cohort}}$$

LIVE WEIGHT SOLD / SUBSTANDARD FINISHER PIG

The average live weight of a group of substandard finisher pigs.

Formula:
$$\frac{\text{Sum of live weights of substandard finisher pigs sold in period or cohort}}{\text{Sum of numbers of substandard finisher pigs sold in period or cohort}}$$

STANDARD FINISHER PIG SALES RATE

The proportion of finisher pig sales that are standard pigs.

Formula:
$$\frac{\text{Sum of finisher pigs sold as standard pigs in period or cohort}}{\text{Sum of numbers of (all) finisher pigs sold in period or cohort}}$$

22.6 Calculation of PW/S/Y

Porcitech uses the National Pork Board recommended standardized formula to calculate **Pigs Weaned per Mated Female per Year**. This formula is considered to be the "actual" number, and is simply the number of pigs weaned in the time period, divided by the average mated female inventory in the period, adjusted on a yearly basis. The formula is $(\text{TotalWeaned} * 365 / \text{MatedFemaleDays})$.

The old formula, most commonly used by Pigchamp DOS, used gestation days in its formula $((\text{pigs weaned in the period} * (\text{gestation days in the period} / \text{mated female days in the period}) * (365 / 115)))$. This value is considered "optimistic" because it is inflated in recent time periods due to the fact that some females will eventually fall out of gestation and never farrow. It should not be used for monitoring or comparing performance until a gestation length has passed because the values are not stable.

The old formula is an overestimation of what was actually produced over the year. Since you can only sell actual pigs from females that actually farrowed, most systems have moved to the NPB "actual" calculation.

However, you can continue getting the old traditional values in Porcitech by adding another formula:

1. Open Porcitech and go to reports, then Breeding Herd sheet
2. Select the Performance Analysis report and click Design button
3. Go to the desired row and click INSERT key to add a new row above
4. Enter Weaned/Mated Female/Year (PC) as title
5. Enter $\text{Divz}(\text{GestationDays} * 365 / 115, \text{MatedFemaleDays}) * \text{Divz}(\text{LastWeaned}, \text{FemalesWeaned})$ as expression
6. Enter #0.00 as mask

For the Weaned/Female/Year value, which includes your unmated gilt pool, the procedure is the same but the formula is $\text{Divz}(\text{GestationDays} * 365 / 115, \text{FemaleDays}) * \text{Divz}(\text{LastWeaned}, \text{FemalesWeaned})$

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